

Friday 30 November, 09:00 - 13:00

*Organised by Ealing Council, URBED, TEN Group
and NLA*

*Sponsored by Berkeley First, Embassy of Denmark,
JMP Consultants Ltd and Peter Brett Associates*

1. TEN Group visit to Copenhagen:

An excerpt from a report of the Copenhagen TEN Group study tour, including a profile of the city and a description of Orestad

2. Good Better Best:

Exerpts taken from the city of Copenhagen's bicycle strategy 2011 – 2025

3. After Bradley, we must make our roads safe for cyclists

Article from the Guardian, Monday 23 July 2012

2. LEARNING FROM COPENHAGEN

2.1 Sustainable urban development

Copenhagen has been voted the second most liveable city in the world by Monocle Magazine (the first is Vancouver), and comes top in Siemens ratings of cities in terms of their greenness. As the former capital of an empire, Copenhagen still feels grand, while enjoying a lively human scale lifestyle. It is one of a number of Scandinavian cities that have overcome their peripherality and lack of natural resources through well-conceived and executed public investment. The city as a whole has a population of 1.7 million out of a total Danish population of some 5 million, but effectively forms part of a metropolitan agglomeration on both sides of the Øresund with a population of nearly 4 million.

According to the Danish Minister of Culture, who spoke at an event on June 29th run by New London Architecture to draw lessons for East London, what makes Denmark special is their *'concern with combining aesthetics, and a city that looks good, with a city that also is fair to all its citizens'*. The Danes believe that the quality of the environment affects people's behaviour, and have been putting social democratic principles into practice for many decades. There is a tradition of municipal leadership, despite there being seven different mayors in the conurbation. Copenhagen is one of the few cities that uses Land Value Taxation, and this no doubt helps to ensure that all the city's space is well-used, with little vacant space.



Top: Restored warehouse quarter of Nyhavn and historic Copenhagen

Bottom: The Black Diamond, Copenhagen's new library and The Danish Royal Theatre

Instead of going for a Green Belt, as in London, Copenhagen adopted its famous Finger Plan (EGNSPLAN) in 1948, in which development was concentrated along a series of five corridors based on public transport routes into the centre. The latest is Ørestad, an extraordinary 'new town in town'.

Much of the city centre dates from the 17th and 18th centuries, with some grand buildings, but the overall feeling is one of a relatively compact and coherent city, with extensive water areas that assist (and sometimes obstruct) personal navigation. Major regeneration projects have also taken place along the very extensive waterfront, with the result that wealthier Danes have been attracted back to live in the city centre.

Today there are plans to provide homes and jobs for 40,000 more people over 40 years with 3.4 million m² of construction. The watersides have been opened up, and there are a number of major new developments of former industrial sites. Use has been made of international architects, often selected through competitions, to achieve a diversity of styles. As a result living in the city, and in the new developments, is very popular, and for a long while every new apartment was sold off plan. With the financial crisis, developers have stopped building, and plans may need to be reconsidered.

Regional Structure – Finger Plan 1947
Taken from a presentation given by Tøger Nis Thomsen, Architect and Town Planner, Copenhagen City Council

The Scandinavian Context

The Scandinavian countries have been remarkably successful since the last World War in developing great places to live as well as thriving economies, and in putting sustainable development principles into practice. This is despite their peripheral locations and relatively small populations. Both Sweden and Denmark score well in surveys that measure both environmental and social sustainability. Sweden now has the highest economic growth rate of any OECD country, whereas in the 19th century a quarter of the population were forced to emigrate to the USA.

Like the UK they have monarchies, but are less centralised and more egalitarian. While national governments have shifted to the right, (partly in response people moving into the cities from abroad), local government still plays the leading role in spatial development. The movement to new suburbs is being checked by developing new urban quarters that meet the highest sustainability standards alongside upgraded public transit systems. They have also taken action to make their city centres truly memorable, through extensive pedestrianised streets and bike ways, outdoor cafes (with blankets to fend off the cold), and the greening of post war estates as a means of changing their image. Above all they have invested in developing a sustainable infrastructure in terms of transport, energy, water and waste, and have made regional planning work.



The Øresund Region: a model for Local Enterprise Partnerships?

In 2000, five years after Sweden joined the European Union, Denmark and Sweden were joined together by the Øresund Bridge. This created a region of some 3.6 million people, and a new player on the European economic stage. The bridge, which is 11 miles long, was only approved by the two governments in 1991/93, and finally confirmed by a Swedish Court decision in 1995 only weeks before construction started. The idea behind it was not only to change traffic flows in Northern Europe, but also link the two sides together, thus creating a more dynamic and competitive urban area.



The region works through a regional plan drawn up by the municipalities on both sides. 25,000 Swedes come over every day to work in Copenhagen, and take many of the jobs, such as serving in hotels and restaurants. Conversely many Danes have moved over to Malmö to live, where living costs are lower, and there are also differences between the countries in whether you are taxed where you live or where you work.

With frequent train services Malmö is under half an hour from Copenhagen, and the bridge also carries a motorway. Services will be improved still further when the new rail tunnel is complete that will link directly through to Stockholm, and when Copenhagen is eventually linked to the high speed line to Hamburg. With a first class airport serving more than 120 destinations, both Copenhagen and Malmö have already become much more competitive as locations for international businesses.

Early schemes, which were influenced by London Docklands, made the mistake of just building offices, and are now seen as sterile. Instead the emphasis now is on authenticity, balance, connectivity and diversity. The main recent developments have been in Islands Brygge, which were part of the port, with mixed use schemes that provide a substantial public realm along the waterfront. Attention has now shifted to the Northern Harbour, Nordhavn, where a masterplan has been drawn up following an open competition which drew 180 applicants. The idea is that ordinary people should be able to benefit from living by the waterfront, and that all will live close by public transport. The three winners were funded to develop

their ideas, and included young architects who would never otherwise have got the chance to see their ideas put into practice.

The area is being developed by a joint company By & Havn (the City and Port Development Corporation) set up by the City and the Danish government and who are also responsible for the development of Ørestad and the new metro lines. The intention is to develop the area incrementally, starting where it is easiest, and to make serviced sites available in small parcels. The guiding principles are to densify the region in order to support high quality public transport, to give people the right to a sustainable lifestyle, to make the most of water, and to create a more diverse city.

2.2 Mobility

Copenhagen is widely thought of as the bicycling capital of the world, and some 37% of trips to work are now made by bike. Cycling, we were told, is *'a way of life, a lifestyle, as well as being cheaper and more efficient'*. This was not always the case. There are now 460 km of cycle tracks and 1.2 million cycle every day. Over ten years, kilometres cycled have increased by twice as much as kilometres driven. This has been achieved by a combination of measures, including extensive cycle lanes, doing away with roundabouts, providing cycle storage on the suburban trains, and ensuring that offices provide changing facilities. Though car ownership went up by 40% between 1995 and 2005, usage only went up by 10%. Bus rapid transit has reduced journey times by 23%, and has produced great economies.

The City invests some €10-20 million a year in cycling facilities and the process of change has taken 40 years. Inside Copenhagen's central area there is a system of free bicycle hire; a system later taken up by Paris and London. As they have not been able to implement a congestion charge, the modal shift has been achieved through more subtle ways. The City's engineer progressively cut the amount of parking spaces by 3% a year - enough to make a difference over time but not enough to create too much opposition and this has provided space for cycle lanes as well as wider pavements on the main streets, and some shared surfaces on minor streets.

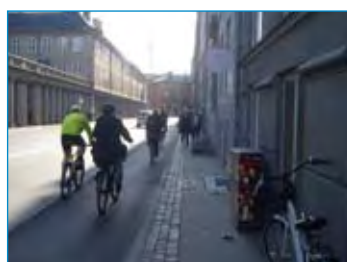
One of the concepts is of a 5 minute city where everything you might regularly want is close at hand, with a third of the movements by public transport, a third

Summary 1995 - 2004

Key figures						
Kilometres cycled (million km per day)	1.13	1.11	1.05	0.92	0.83	0.80
Proportion who cycle for other purposes than work (%)	89	-	-	-	-	-
Proportion who cycle for recreation and exercise (%)	25	-	-	-	-	-
Cycle track length (km)	329	323	307	302	294	293
Cycle lane length (km)	14	12	10	6	-	-
Green cycle route length (km)	37	32	31	30	29	28
Cycle track maintenance (DKK million)	8.9	8.8	8.1	5.3	4.7	3.8
Serious cyclist casualties (number)	124	152	146	173	252	231
Serious cyclist casualties at signalised junctions (number)	38	52	57	54	88	81
Dedicated cycle parking spaces (1,000 spaces)	20.5	-	-	-	-	-
Cycle Policy target figures						
Proportion who cycle to work (%)	36*	32**	34	30	30	31
Cyclist risk (serious casualty per 1 million cycle km)	0.30	0.38	0.38	0.52	0.74	0.79
Cyclist sense of security (%)	58	56	57	68	60	61
Cyclist travelling speed (km/h)	16.3	-	-	-	-	-
Cycling comfort (satisfactory surface in %)	2*	5	19	-	-	-
	2004	2002	2000	1998	1996	1995

*=2003 eq **=2001

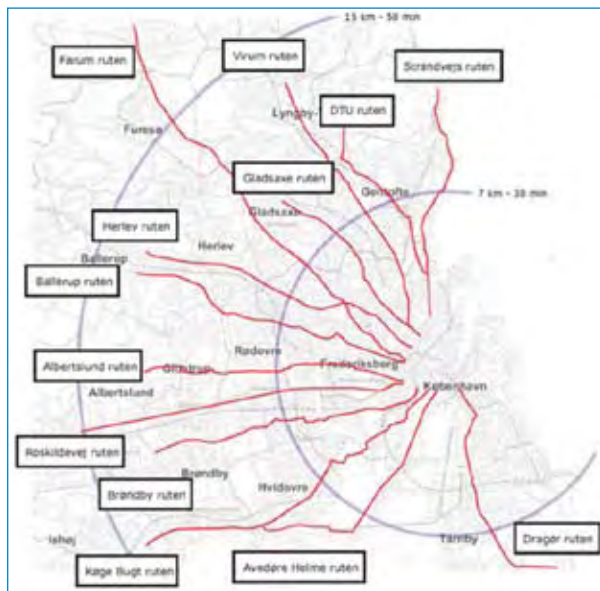
Bicycle Strategy: Key Indicators



Cycling in Copenhagen

by bike, and a third by car. This is being achieved through a 'green loop' in which cyclists and pedestrians have the shortest and most direct access to the city centre. Interestingly in the new development of North Harbour, only one parking space per 2,000 sq ft is to be provided, but a new metro line is planned to supplement the existing rail system.

The Cycle Superhighway is one of the major transport initiatives currently underway. It is a joint project between 18 municipalities, the council for the region and the government with the aim of increasing cycling from 37% to 50% of trips by 2015. The concept is to build a network of commuter routes, which are all built to the same standard and link up with public transport. The masterplan is to be completed this year and the first route to be built in 2011, costing 15 million kroner (approximately £1.7 million). One of the routes is being paid for by a cancer charity.



Copenhagen's plan for a Cycle Superhighway

The City Council are committed to increasing the number of journeys taken by bus by improving quality through faster journey times, smoother linkages and better bus stop facilities. In Frederikssundsvej a city neighbourhood that has no rail service and one of the busiest bus lines they are looking to introduce a Bus Rapid Transit Route by 2013 (see page 8), which they hope will increase passenger numbers by up to 30% (1,500 – 5,000 a day) and reduce journey times. They hope the money invested in the Rapid Transit Route will reduce journey times and require fewer buses, which will reduce the cost of the bus service in the long run.

Strøget

Copenhagen's main shopping street, Strøget (literally "the stroke" or "straight line") is one mile long, the longest pedestrian shopping



area in Europe. Stretching from Rådhuspladsen (The City Hall Square) to Kongens Nytorv (The King's New Square), it is actually a succession of streets stretching out from a central axis. It was pedestrianised as early as the mid-1960s after a fierce controversy. Elsewhere in European cities, pedestrianisation had been introduced only after construction of an elaborate Inner Distributor Road system to take the diverted flows of car traffic. Proponents of the scheme, including the architect-planner Jan Gehl, argued that this was unnecessary. His philosophy is to develop playful streets, and to treat them 'as if you were holding a party.' They were proved right: the traffic effectively "vanished". Today it is one of the most successful shopping streets in Europe.



Kryds ved Brønshøj Torv - Bus Rapid Transit

Skråfoto



■ Bredbane
■ Uafhængt busstop
■ Mellemhæle
P Parkering og Vejtræer

Streetview og tværsnit



Tværsnit fra fortove til fortove er 21 m.
 Tværsnittet er i perspektiv og derfor ikke målt.

Det faktiske kryds ved Brønshøj Torv

Kryds ved Havdrupvej - Traditionel løsning

Skråfoto



■ Bredbane
■ Uafhængt busstop
■ Mellemhæle
P Parkering og Vejtræer

Streetview og tværsnit



Tværsnit fra fortove til fortove er 21 m.
 Tværsnittet er i perspektiv og derfor ikke målt.

Det faktiske kryds ved Havdrupvej

Restructuring street space on a main road in Copenhagen
 Taken from a presentation given by Klaus Grimarwho, Traffic
 Planning Department, Copenhagen City Council

2.3 Quality streets

Main roads are being turned into quality streets, with an agreed strategy for restructuring most of the main routes into the city centre. This has been pioneered in Nørrebrogade, a two kilometre road linking inner and outer Copenhagen. Its previously narrow pavements and wide road accommodated some 3-12,000 pedestrians, 30,000 cyclists, buses every 3 minutes, and 17,000 cars a day. The vision was to improve urban life, make cycling safe, integrate the buses, and cut cars by 40%.

A masterplan with four options in 2007/8 was followed by pilot projects using temporary steps to widen pavements and cycle tracks and improve bus facilities. A dialogue with stakeholders led on to a survey which showed that 2/3rds of residents were in favour but 2/3rds of shop-keepers were against. The City Mayor had the courage to back the project, and cars have since been reduced by 30% while shop keepers are now putting out good for sale and opening up pavement cafes. The pilot cost £1 million (much of it on consultation) and the full scheme £3 million.



Nørrebrogade before the experiments



Temporary experiments

RECIPE FOR SUCCESS

Copenhagen - The City of Cyclists

GOOD, BETTER, BEST - here is the recipe for success:

GOALS:

MODAL SPLIT FOR BICYCLES:			
	2015	2020	2025
Share of all trips by bicycle to work and school in Copenhagen (2010: 35%)	50%	50%	50%
QUALITY:			
Share of the network that has three lanes (2010: 25%)	40%	60%	80%
Relative to 2010, cyclists' travel time is reduced by	5%	10%	15%
Percentage of Copenhageners that feel safe cycling in traffic (2010: 67%)	80%	85%	90%
Relative to 2005, the number of seriously injured cyclists will fall by	50%	60%	70%
Percentage of Copenhagen cyclists who find the cycle tracks well maintained (2010: 50%)	70%	75%	80%
Share of Copenhageners who think that bicycle culture positively affects the city's atmosphere (2010: 67%)	70%	75%	80%

TRAVEL TIME

- Bicycle Superhighways (network of routes in the capital region).
- Small short cuts (200-400 in all, including contraflow on one-way streets, shunts, etc.).
- Large short cuts (5-8 bridges/underpasses).
- ITS on, for example, routes with Green Waves for cyclists.
- E-bikes - (infrastructure and promotion).
- Information about the best routes (signage, GPS solutions).
- Lower speed limits for cars where necessary, for example around schools.
- Better combination of metro/train/bus and bicycles, including a bike share programme and better parking facilities at stations.
- Increased population density.
- Behavioural campaigns focusing on signalling and overtaking with care.
- Cooperation with the police regarding changing traffic laws, including creating contraflow on one-way streets, as well as solutions that make it possible to turn right at red lights.

COMFORT

- Smoother asphalt on the cycle tracks.
- Improved snow clearance and sweeping.
- Effective bicycle parking (infrastructure, partnerships, and collecting abandoned bicycles).
- Services (air pumps, fountains, 'bicycle buddy' apps, weather reports, etc.).
- Partnerships with workplaces and educational institutions regarding bicycle facilities and information.
- Better conditions for city employees (parking, changing rooms, bike repair, etc.).
- Development of new products (valet parking for cyclists, surface treatment for cobblestones, etc.).

SENSE OF SECURITY

- Green bicycle routes.
- Intersection redesign (including cycle tracks running right up to the intersection as standard and pulled back stop lines for cars).
- Wider cycle tracks where there are bottlenecks.
- New cycle tracks and lanes (30-40 km).
- Wider cycle tracks in general (10-30 km).
- Painting lanes on wide and busy cycle tracks.
- Bicycle and bus streets.
- Campaigns related to consideration and behaviour.
- Safer routes to schools.
- Traffic policy at various schools in Copenhagen.

TWO EXTRA INGREDIENTS

The recipe has two added ingredients with accompanying activities that aren't covered on the previous pages, but that are just as important on the journey to creating the world's best bicycle city and encouraging more people to ride:

LIFESTYLE AND IMAGE

- Marketing relating to image, lifestyle, the advantages of cycling.
- Campaigns aimed at specific target groups who have the potential to cycle more, including newcomers, the elderly and people who use the car for short trips.
- A sense of ownership, for example campaigns like Your Bicycle City, Your Mother's Bicycle City.
- Online - a one-stop bicycle portal.

EXPERIENCES

- Integrating the experience of wind and weather into cycle track design.
- Communicating positive bicycle experiences (including ideas like Your Favourite Route, Your Favourite Short Cut).

For more information about cycling in Copenhagen - please visit www.kk.dk/cityofcyclists

A BETTER BICYCLE CITY A MORE LIVEABLE CITY

36%

of all trips to work or educational institutions in Copenhagen are by bicycle,*
equalling 0 tonnes of CO₂ emissions.

This high percentage of the modal share is
a key element in the declared goal of making
Copenhagen

CO₂-neutral
by 2025

*Average 2008-2010

A bicycle-friendly city is a city with more space, less noise, cleaner air, healthier citizens and a better economy. It's a city that is a nicer place to be in and where individuals have a higher quality of life. Where accessibility is high and there is a short route from thought to action if one wants to head out to nature, participate in cultural or sports activities or buy locally. Bicycle traffic is therefore not a singular goal but rather an effective tool to use when creating a liveable city with space for diversity and development.

Fortunately, it pays off to invest in urban cycling. Increased cycling levels give society less congestion, fewer sick days, longer life expectancy, less wear and tear on the roads and less pollution. Cycling initiatives are also inexpensive compared with other transport investments.

The eyes of the world are already focused on Copenhagen - The City of Cyclists. By continuing the ambitious work towards becoming the world's best cycling city, we maintain the many positive stories about the city. Stories that brand Copenhagen as a liveable, innovative, sustainable and democratic city with a political will to lead the way in the battle for an improved quality of life for the citizens. By aiming to be the best in the world we can show the way for other cities around the world and raise the bar for what is possible in the area of urban cycling.

WHAT NEEDS TO BE DONE?

Copenhageners choose the bicycle because it's the fastest and easiest way to get around. Period. If the numbers of cycling citizens are to increase it is all about making the bicycle the fastest and easiest way to get around for even more citizens than today.

This is not possible without a strong prioritising of bicycle-friendly infrastructure and a will to think out of the box. These are therefore the two central principles in the bicycle traffic area: prioritising and innovation.

PRIORITISING

The cycle tracks of Copenhagen are already under pressure during rush hour. It is necessary to give more space to cyclists on the main arteries. In order to increase the sense of security, make it possible for people to ride at their preferred speed and, not least, to make it more attractive for those who are too insecure to cycle today. In some places the existing cycle tracks will be widened, in other places alternative routes will be necessary to move some of the bicycle traffic away from the congested routes. Infrastructure expansion will be accompanied with campaigns focused on more considerate behaviour in traffic.

"Travel times are a central parameter for competitiveness, regardless of which type of transport you are dealing with."

It is therefore necessary to improve travel times by bicycle compared to other transport forms. It requires prioritising ambitious short cuts like tunnels and bridges over water, railways and large roads. In addition, it requires many small speed improvements, including allowing contraflow cycling on one-way streets, allowing cycling across squares, implementing more Green Waves for cyclists, etc. Finally, traffic calming - on quiet streets near schools, for example - is also necessary if the bicycle is to have a serious advantage in traffic.

INNOVATION

One of the unique things about Copenhagen is our cycle tracks. Working to expand and develop our cycle track network must continue. If we are to encourage many new cyclists to get onto their bicycles it is crucial that we're open to new concepts. Regardless of whether it is infrastructure or other types of solutions. It could be, for example, making certain streets one-way for cars in order to create improved space for better cycling conditions, new types of bicycle parking - including cargo bike parking - and initiatives that make streets with cobblestones into attractive cycle routes.

Infrastructure like footrests at intersections and air pumps have both a practical and a communication value. Partner-

CITY LIFE
COMFORT
SPEED
SENSE OF
SECURITY

ships within the municipality should put the bicycle onto the agenda as a way to improve health and integration. In addition, external partnerships with companies, shopping districts, public transport providers, neighbouring municipalities, etc., ensure optimal effect and anchor the various initiatives. Finally, it is necessary to work systematically with communication campaigns aimed at specific target groups with the potential to cycle more.

SAFE, QUICK, COMFORTABLE AND LOADS OF CITY LIFE

These keywords should define cycling in Copenhagen if we are to achieve our goal of becoming the world's best bicycle city. Therefore, each of these keywords is a theme on the following pages. We'll give examples of how each of them can be improved through prioritising and innovation. The complete recipe for becoming the world's best bicycle city, including the specific political goals, is summed up at the end of this document.

First, a few statistics about Copenhagen - The City of Cyclists.



Jackie Ashley

...s' triumph will
...e many of us to
...o two wheels. Now
...time to take bold
...n against cars

After Bradley, we must make our roads safe for cyclists

It would be quite a paradox, wouldn't it, if after London's success against Paris in winning the Olympics, the most significant British sporting success this summer turned out to be the one that happened not in London but in Paris. All hail Bradley Wiggins, a yellow-jerseyed hero for our times, the new patron saint of the velocipede-smitten British.

Wiggins is of course already a triple-gold Olympian, and Britain does well in cycle races across rather shorter distances than the Tour de France - think of Chris Hoy, Victoria Pendleton and Jason Kenny as well as Wiggins right now. This Saturday we'll see the road race finals zipping close to my front door; then the wonderful "Pringle" velodrome comes into its own for the sprints.

But cycling is one of those very few sports - and indeed may be unique - that is far more than a competitive activity. Indeed, it's a full-blown environmental, transport and health revolution, a popular craze, an urban mania.

Almost all of us watching the bulk of Olympic events - the diving, butterfly swimming, 100m sprinting, javelin-throwing or gymnastics - are simply oo-ing and ah-ing in awed admiration at the skill, guts and physique on display. A miniscule minority of younger people will be enthused so much they take up a sport, stick with it and find it a source of pleasure all their lives. Wonderful - but we're talking about a minority. We, the majority, are mere spectators and always will be.

Cycling's different. I'm old enough to remember when a thinly clad, colourful figure on a skimpy-looking bike with low handlebars was a rare sight. Weird looking, probably French. Here, bicycles were sturdy, three-gear objects for children, students and, as Orwell told us, old maids.

But over the last decade, speeding up in the last few years, all this has changed. Our streets have been filling up with Lycra-clad buttocks and formidable helmets. Month by month, the stream of cycling commuters swells, from the suits on their Raleighs and folding bikes to the cool kids whose super-expensive machines come with a whole lexicon of weird names - Forme Zenith, Ghost Race Lector, Nukeproof Snap, Kona Shonky. Once my local high street had building societies, clothing shops and video stores; now it's all bike shops, brimming with clothes, drinks, "nutrition bars" and more gleaming ironwork than the Royal Armoury.

London tends to hog the attention with its blue bike lanes and (unfairly dubbed) Boris bikes, with their now-unfortunate Barclays branding. To be fair, building on Ken Livingstone's work,

Boris Johnson has done quite a lot for cycling in the capital. For once, the bike systems pioneered on the continent have translated quite effectively to Britain. Those who said our climate was too dismal and our winters too long for cycling to really take off have already been proved wrong.

A London School of Economics study last August suggested that around 13 million Britons were regular cyclists. That must be nearer 15 million by now. In Manchester and Bury, for instance, there's an ambitious programme of erecting glass-box "cycling hubs" where people can safely leave their bikes - theft being one of the dangers of urban cycling. Four years after Bristol was chosen as Britain's first "cycling city", it has impressive systems of lanes and cycle-parking spaces.

Indeed, in virtually every city or town there are helpful websites for cyclists, maps, and advice on journeys and car-free routes. More and more major firms have schemes to encourage employees to arrive by bike. Outside the cities, the Bristol-based campaigning group Sustrans promotes 12,000 miles of traffic-free routes - the National Cycle Network.

However, this revolution is nothing like complete. In 2010, the last year for which have figures, 111 cyclists were killed on the roads and 2,660 were seriously injured. Even in London, despite the ballyhoo, few cycling commuters have routes that don't involve close calls with lorries and speeding cars. Until big cities have a web of car-free routes that

can carry most people on two wheels where they need to go, urban cycling will remain dangerous.

And smelly. More good employers are providing changing facilities and showers, as well as safe places to leave bikes, but they are still in the minority.

So there is a way to go. In its latest edition, Prospect magazine carries a thoughtful, slightly wistful piece by the former Labour MP Chris Mullin in which he calls for the abolition of the private car. Mullin says he wants "a return to that brief golden age when the bicycle was king, when every little town and many villages were connected to the railway network, and when our inner cities were habitable".

That might be going too far for today's politicians, but the effect of hard times and the oil price on budgets, and the sheer misery of modern car commuting, suggests that a more radical agenda could be popular. That means much bolder support for cycling, with cars banned from many more roads and parks. It's one of the few radical shifts in lifestyle that is easily deliverable and for which there is no real drawback: the benefits for the environment and indeed the health of the nation are obvious. Of course, the old and young who can't cycle mustn't be forgotten, as public transport is enhanced. But this is all doable. It's a policy that literally goes with the flow. Instead of new motorways, let's have Wiggins-lanes everywhere.

Twitter: @jackieashley

Almost all of us
...ing the bulk of
...pic events, we
...ere spectators.
...ing is different

