

# A sustainable future for transport: Towards an integrated, technology-led and user friendly system

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Submission from Sustrans

August 2009

Sustrans is the UK's leading sustainable transport charity.

Our vision is a world in which people choose to travel in ways that benefit their health and the environment. We work on practical, innovative solutions to the transport challenges facing us all. Sustrans is the charity behind the award winning National Cycle Network, Safe Routes to Schools, Bike It, TravelSmart, Active Travel, Connect2 and Liveable Neighbourhoods, all projects that are changing our world one mile at a time.

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## 1.1. Introduction

Sustrans is the UK's leading sustainable transport NGO. We work on a range of practical projects in the UK facilitating healthy, active, sustainable urban transport. We also collaborate with partners across Europe and the rest of the world, and provide evidence and best practice to assist in such development.

We welcome this opportunity to contribute to the development of European transport policy post-2010. Our view is that EU transport policy should now be driven by the combined issues of obesity, global climate change and energy security, and therefore that sustainability, climate protection and public health should be central. Transport policy should be designed in conjunction with policies in these other sectors, and its implementation should be measured against these broader objectives. We therefore urge that European transport policy should avoid over-reliance on technology to address the challenges of a post-2010 world.

As Sustrans' practical expertise relates to shorter trips, and mainly to urban travel, we have concentrated our comments on these areas. The majority of trips in Europe, 40% of the CO<sub>2</sub> arising from road traffic and the main social and public health impacts of current transport policies all relate to urban travel; we therefore feel it is indispensable for the EU to take a role in directing urban transport policies and programmes.

We also describe some of the measures that should be used to achieve a modal shift from private car use to walking and cycling for shorter trips.

## 1.2. Our recommendations

European transport policy post-2010 should have as its central objectives:

- to reduce the need to travel, and reduce the distances we need to travel
- to reduce climate change emissions, in line with the scale of emissions reduction targets set from time to time by the European Union
- to promote active, healthy forms of transport – walking and cycling – for shorter and particularly urban trips, and restrain private motorised transport
- to reduce toxic emissions from motorised transport
- to promote accessibility over mobility
- to reduce reliance on imported oil
- to improve the quality of life for European citizens.

The Commission should address this by:

- a shift in EU-level investment priorities, especially with regard to the TEN-T programme, away from catering for increased travel
- and specifically, by allocating both capital and revenue investment from the TEN-T programme to EuroVelo, the European cycle route network
- more actively promoting modal shift from private motorised transport to walking, cycling and public transport within European cities
- recognising and working towards common objectives in areas such as physical activity promotion, obesity, social inclusion and crime reduction, as well as environmental and sustainability policy
- ensuring transport policy is fully integrated with policies on land use, development, zoning etc.

### 1.3. General

Past transport policy has accepted that growth in travel is both intrinsically desirable – a good thing in itself – and also unavoidable. It has tended to cater for this growth with enthusiasm, because most transport policy makers and strategists are themselves motorists, regular air travellers, have complicated patterns of personal travel and feel personally frustrated by traffic congestion and delay. We call this the ‘windscreen perspective’: a policy maker from this group may have difficulty understanding that their lifestyle and travel behaviour are not representative of wider society.

This windscreen perspective has many consequences. The Communication, although it makes clear and quite explicit reference to climate change, public health and other policy drivers, does not grasp the difficult issue of the evident need to reduce motorised travel. It contains, in its 19 pages and 94 points, one reference to walking and two to cycling. We need to break the chain and look forward, to a world of severe restrictions in energy supply, accelerating and grave climate change, and the impact of sedentary living in terms of non-communicable disease and a rising proportion of national income treating the healthcare consequences.

In the past, urban transport policy has been dominated by mobility (the ability to travel) rather than accessibility (the access to the goods and services which are the motives which encourage people to travel). This has resulted in longer and longer journey distances, ever-increasing motor traffic levels, and a very wide range of negative side-effects. We are very pleased to see clear acknowledgement of this issue in the Communication (point 38 and 59), but we urge you to clarify further – people need access not to transport systems, but to the destinations, services, goods, employment etc which they desire, and the aim of transport policies and programmes should be to allow them this access, with the minimum need to travel.

Sustrans warmly welcomes the recognition, in points 70 to 74, that our approach to transport must change, and particularly that the transport user should bear all of the relevant costs. We recognise that these proposals will be aggressively opposed by powerful lobbies, and wish the Commission and Parliament courage and success in seeing them implemented.

However, we fundamentally disagree with the assumption, in the title of the Communication and woven throughout the text, that technological advances can address the challenges of transport in the 21<sup>st</sup> century. There is simply no evidence for this; despite huge amounts of state and EU aid to the motor industries for example, motor vehicle efficiency has scarcely advanced over half a century, while the context is that emissions must fall steeply and rapidly.

### 1.4. Transport policy should be effective across policy sectors

European transport policy post-2010 should have clear policy objectives in the areas of climate change, public health, communities and social inclusion, and energy security and peak oil. Each of these objectives will best be served by reducing the need for individuals to travel, and by reducing the distances they need to cover.

Transport is the second largest single source of climate change emissions in Europe and is rising rapidly. Transforming transport will be critical to achieving the EU's current and future commitments on climate emissions reduction. There is great potential to reduce emissions by shifting journeys from motorised to non-motorised modes on the urban scale. Sustrans' work for the UK Department for Transport has shown that in representative UK cities 47% of car trips could be replaced by walking, cycling or public transport, without major intervention<sup>(1)</sup>.

Happily, measures to reduce the volume of motor traffic also promise significant improvements in population physical activity levels, addressing obesity, cardio-vascular disease, type 2 diabetes, many forms of cancer and mental ill-health. They will improve urban quality of life, address anti-social behaviour by populating the streets, and free up urban public space for more socially desirable usage. Post-2010 transport policy should target this potential for benefits in a range of areas, arising from reduction in the need to travel and in volumes of motor traffic.

### 1.5. Restrain motor travel in urban areas

Urban transport is a major factor in the environment within which most European citizens live. Policies and practices impact on people's lives, their social interaction, whether they are able to lead healthy, physically active lives, and their ability to live sustainably. As the Communication acknowledges (point 32), urban transport generates 40% of the CO<sub>2</sub> and 70% of other pollutant emissions from road transport; it is also where other negative impacts of road transport, such as noise and community severance, seem to be most felt.

There is great potential for change, which can be tapped by investment in infrastructure to support walking and cycling, and measures which reduce the provision for private motorised transport and so shift the balance of advantage towards the healthy and sustainable modes – measures such as:

- reallocation of road space (for example by widening pedestrian footways)
- restricting motor vehicle access (for example by closing or narrowing roads)
- introduction of road-user charging schemes
- traffic-calming schemes
- reduction in area-wide speed limits.

The recommended measures above are taken not from a transport campaign manifesto but from guidance published by the UK National Institute for Health and Clinical Excellence<sup>(2)</sup>, and from a joint policy call issued by over 100 public health, environment and transport bodies in the UK<sup>(3)</sup>.

Particularly important is the reallocation of road space to walking, cycling and public transport, and also to public space – we currently give over too much of our shared urban space to transport uses.

Reducing the speed of traffic – including motorcycles – not only helps make city streets safer but makes it easier for people to choose active ways of travelling. UK research suggests that 30kph zones in residential areas can increase children's use of streets and encourage more adults to walk or cycle<sup>(4)(5)</sup>.

Other measures to reduce the dominance of the car in urban areas include making access by sustainable modes simpler, more convenient and less time consuming than access by car, priority lanes for cyclists and public transport, intersection treatments to improve safety for cyclists, parking restrictions, pavement widening, raised crossings and re-phasing of light-controlled crossings in favour of pedestrians.

## 1.6. Road user charging

Road user charging has an important role to play in a sustainable urban transport policy by helping to change how and how much we travel. It encourages drivers to think more about the individual journeys they make. Its principal objective should be to reduce the volume of motorised traffic within our cities, thereby reducing emissions from transport and encouraging people to walk and cycle.

Several European cities, including London, Oslo and Stockholm have successfully used road charging coupled with improvements in public transport and other alternatives as a means of reducing car use. Since the introduction of the London scheme in 2003, private motorised transport levels have declined, public transport and cycling are up, road crashes have declined as have congestion and pollution<sup>(6)</sup>.

However, road user charging should not be used simply to cut congestion, and congestion reduction should not be a primary objective of transport policy. Such an objective usually leads to the expansion of road capacity, which then generates additional motor traffic, with all its negative consequences. Road space liberated by the charging regime should be 'locked in', by reallocating it away from private motorised transport. If this is not done, over time motor traffic will expand again to consume the liberated road capacity.

## 1.7. Climate change emissions reduction

Transport is the second largest source of greenhouse gas emissions in Europe and is rising rapidly. Transforming transport will be critical to achieving the EU's current and future commitments to greenhouse gas emissions.

Technological improvements alone will not be enough to deliver the scale of emissions reductions needed from the transport sector, and it is dangerous to place too much faith in technology. More immediate reductions can be accomplished by restraining motor transport and encouraging a shift towards sustainable modes.

There is in particular a very great potential to reduce emissions by shifting journeys from motorised to non-motorised modes on the urban scale. Sustrans' own work for the UK Department for Transport has shown that in representative UK cities 47% of car trips could be replaced by walking, cycling or public transport, without major intervention<sup>(7)</sup>.

The UK Royal Commission on Environmental Pollution recommended in 2007 that new transport infrastructure should contribute to environmental sustainability. It says "long-term financial mechanisms need to be put in place to achieve this, and national guidance on planning and infrastructure needs to be clear about the objectives that are to be achieved. Long-term institutional responsibilities for new infrastructure also need to be clarified..... We recommend that the government develops and strengthens requirements for Local Transport Plans, such that by the end of 2008 they can include statutory targets for reduction in urban traffic"<sup>(8)</sup>. These recommendations encapsulate the way EU policy should develop, and demonstrate why transport is too important to be left to the lowest level of government.

The recent discussion document from the UK Department for Transport: 'Towards a Sustainable Transport System – Supporting Economic Growth in a Low Carbon World' recognised the significant contribution transport policies can make to achieving carbon reduction. Robust and integrated policies are needed at the local, regional, national and international level to ensure urban transport planning responds appropriately to the scale of the greenhouse gas reductions that are required.

There are powerful economic arguments in support of action to reduce climate emissions. The Stern Review on the economics of climate change for the UK government<sup>(9)</sup> says, "the benefits of strong and early action far outweigh the economic costs of not acting". The overall costs and risks of climate change were evaluated as equivalent to losing between 5% and 20% of global GDP each year, while the cost of reducing emissions to avoid the worst impacts of climate change can be limited to around 1% of global GDP each year. Stern concluded that "climate change demands an international response, based on a shared understanding of long-term goals and agreement on frameworks for action". Building on the Stern Review, the Eddington Transport Study<sup>(10)</sup>, concluded that the transport sector needs to play its role in economy-wide reductions in greenhouse gas emissions. For economic reasons as well as social or environmental, Eddington concluded that all transport users should meet all their external economic, social or environmental costs.

We recommend that post-2010 policies should include year-on-year reduction targets for climate emissions and for energy consumption from the transport sector, in line with the European emissions reduction targets in force at any time. It would be irresponsible to plan for the transport sector to achieve lower levels of emission reduction than those in other sectors.

## 1.8. Public health and physical activity

A central tenet of transport policy over the last five decades has been to accept the growth in private motorised transport as inevitable and to cater for it. One of the consequences of this has been a decline in levels of physical inactivity across Europe, which increases the risk of health problems such as diabetes, heart disease, obesity, stroke, cancers and osteoporosis.

Transport policy can have a positive impact on public health by encouraging a shift to active, healthy forms of travel. One of the easiest ways to increase physical activity is to include walking and cycling in the daily routine, such as during the journey to work or school. In its recent report, 'Promoting physical activity and active living in urban environments', the World Health Organisation stresses the importance of urban transport policies that make it easy for people to choose active and sustainable alternatives to the private car. The WHO says "in Europe, walking and cycling can replace many car trips. Traffic-calming measures, infrastructure such as cycle lanes, tracks and paths and policy changes at the local level can

increase pedestrian and bicycle travel. More people will walk and cycle if the traffic speed is reduced and convenient and safe infrastructure is built such as cycle lanes, tracks and paths<sup>(11)</sup>.

The recent Foresight report: 'Tackling Obesities: Future Choices'<sup>(12)</sup>, released by the UK Government Office for Science in October 2007, recognised the role of the 'obesogenic environment' which encourages people to choose sedentary modes of travel, damaging their health and well-being. The report stated that we need to change the environment we live in, and also promote behaviour change – two central arguments Sustrans makes throughout this submission. Foresight said, "The top five policy responses assessed as having the greatest average impact on levels of obesity [include] increasing walkability / cyclability of the built environment....."

## 1.9. Social cohesion

There is a growing body of evidence showing the impact transport policy can have on social interaction and cohesion within urban communities, and the desirability of moving away from our current over-reliance on private motorised transport.

Studies from as far back as the 1970s show that lower motor traffic levels are associated with significantly higher levels of social interaction<sup>(13)</sup>, and that in neighbourhoods which are conducive to walking and cycling people are more likely to know their neighbours, participate politically, trust others and be socially engaged<sup>(14)</sup>. By increasing levels of walking and cycling within urban areas, transport policy can make a vital contribution to social cohesion, neighbourhood revitalisation and community well-being.

Transport policy should prioritise accessibility over mobility, and therefore should be integrated with land use, development and zoning policy, so that journey distances are not made longer than they need to be. Wherever possible, the goods and services which citizens need should be accessible by walking or cycling from their residential neighbourhoods.

## 1.10. Energy security and peak oil

The European Union and individual member states are rightly concerned about our increasing reliance on imported oil, and the decline in commercially available reserves. Urban transport is very dependent on oil, and a rapid shift away from motorised traffic in urban areas can make an immediate contribution to reducing our exposure to this risk. Ensuring this transition happens in a managed way should be a central tenet of the EU Green Paper and any subsequent policies and action plans on urban transport.

Some very optimistic claims have been made both for new fuel sources and for energy efficient engine and automotive technologies. There is not sufficient evidence that either of these areas can bring rapid and significant reduction in energy consumption. We therefore strongly recommend a policy focus on reducing the need for energy in the transport sector. Brilliant technological advances, if they do come, will add to the impact of this more conservative and evidence-based approach. We should not rely on optimism and faith in technology.

## 1.11. The potential for change

Current patterns of mobility and public attitudes to transport demonstrate that significant potential exists for modal shift towards non-motorised forms of transport, particularly in urban areas.

For example, research in many parts of the EU and elsewhere in the developed world shows that a significant proportion of car trips are within range of walking and cycling. As a general rule around 10% of car trips in urban areas are less than 1km, 30% less than 3km and 50% less than 5km<sup>(15)</sup>.

Furthermore detailed research carried out by Sustrans and Socialdata, part-funded by the UK Department for Transport, showed that the overwhelming majority of people view past and future motor traffic growth as a negative trend<sup>(16)</sup>. The surveys also revealed that:

- around 90% of people support measures to improve conditions for walking, cycling, and public transport, even where these disadvantage car users
- on average 47% of car trips within the surveyed towns could be replaced by walking, cycling and/or public transport without the need for significant changes to infrastructure; modifications to the environment should therefore lead to even greater travel behaviour change.

A range of cost-effective tools are available to deliver behaviour change, focused on improving information, changing perceptions and attitudes, and raising awareness of the alternatives to car use. These measures include workplace travel plans, car sharing, teleworking and individualised travel marketing such as the TravelSmart technique piloted in the UK by Sustrans.

### 1.12. Value for money

A shift in investment priorities away from servicing growth in private motorised transport, and towards the promotion of more sustainable modes, would deliver excellent value for money. Sustrans has used the UK Department for Transport's cost-benefit analysis methodology to analyse sample local elements of the UK National Cycle Network, for example, and found benefit to cost ratios of between 18:1 and 38:1 – around ten times better value than typical road schemes.

We urge that future investment decisions at European, member state and regional level should consider options for investing in healthy, sustainable transport – walking and cycling – instead of in motor traffic growth, and that predictive analysis of this type should be done. In particular we recommend the Health Economic Assessment Tool for cycling, developed by the World Health Organisation and others – including Sustrans<sup>(17)</sup>. HEAT offers the possibility of predicting the value of health benefits arising from cycle infrastructure schemes. A walking version is in development and will be available by 2010.

At the TEN-T level, we recommend that the Commission should recognise EuroVelo, the European cycle route network, as a Trans-European Transport Network – the first sustainable TEN-T – and should invest both capital in its completion to the highest standards and revenue in its management and marketing. EuroVelo may not seem strategically vital in its catering for very long-distance cycling trips, but in the same way as the European roads network, the overwhelming majority of its users are and will be making short local and often regular trips. The European status, standards and branding will all be important contributions to promoting travel behaviour change.

### 1.13. Sustrans overview

Sustrans provides practical solutions to and advises on challenges in transport, environment and health. Our main activities in the UK include:

- The UK National Cycle Network, which carried over 386 million zero-emission journeys in 2008. The Network continues to expand, and usage has grown faster than route length for each of the last seven years; we expect further significant growth in coming years
- Other practical construction projects, such as Links to Schools – over 400 local projects serving 900 schools – and the Connect2 programme of local cycling and walking network development, which secured £50 million of UK Lottery funding in a massive public vote
- Active Travel, which has been at the forefront of work promoting cycling and walking as effective ways of reducing physical inactivity and obesity



- The School Travel programme, which enables 100,000s of children to walk or cycle to school, reduces carbon emissions and prevents ill-health, for the present and the future
- Bike It, a ground-breaking project which consistently doubles the number of children cycling school every day, through innovative approaches to overcome the obstacles to cycling to school. Bike It is now serving over 600 schools
- TravelSmart, individualised travel marketing at household level, offering tailor-made information and support, enabling people to walk, cycle and use public transport more often - this programme has achieved reductions in car travel of between 9 and 14% in every UK project
- Liveable Neighbourhoods, regenerating residential zones dominated by the car, using techniques proven in central and northern Europe, to permit more non-motorised travel
- The Research and Monitoring Unit, which provides the statistical results of each project and, through analysis, advises on future actions.

In the UK we work in partnership with ministries, including Transport, Health, Children Schools and Families, Communities and Local Government and others – national, regional and local government and agencies, community groups, schools and businesses. Internationally, we work with a wide range of individual experts throughout the world in the field of sustainable transport, as well as actively participating in European associations such as European Network for Health Enhancing Physical Activity, POLIS, European Cyclists' Federation and the European Greenways Association.

## 1.14. References

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