Reconciling

Environmental and social transport policies





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This publication was compiled by Stephanos Anastasiadis on the basis of a T&E seminar, held on 19 May 2004, bringing together people from the environmental and social fields to discuss policies in the field of transport, with a focus on the controversial issues of pricing. This paper takes the seminar as its starting point, but is wider-ranging.

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Introduction

European societies have experienced dramatic changes within only a few generations. One of the most important elements has been an increase in the volume of transport. As a result, people now travel further and households spend more on transport.¹

The increase in transport has brought a range of associated problems with it. The environmental issues are well-publicised, and the economic arguments have been thoroughly discussed. However, the social aspects of transport's phenomenal growth have undergone rather less scrutiny.

The effects of social exclusion are numerous, ranging from depression and unemployment to social disintegration. Those living in rural areas normally face the most severe exclusion from goods and services², because the distances to key services are usually greater and public transport can be insufficient. However, city-dwellers can also be seriously disadvantaged. They suffer from unfair distribution of transport's environmental problems while not having the access that such transport brings to their more integrated neighbours (especially if they live far from the centre). Public transport has been unable to keep pace with urban developments³, resulting in decreased opportunities for those without a car.

This division is set to get worse. The World Business Council for Sustainable Development gives the example of elderly people⁴: over the next 20 years in the US, Europe and Japan, there will be a "significant pool" of older people. Transport systems in these areas threaten to exclude an increasingly large proportion of the population as they are increasingly unable to get around by car, and thus find accessing goods and services increasingly difficult. Simultaneously, their social contacts are also being restricted due to their friends being in similar circumstances.

There is a European angle to what at first appears to be a set of purely national or even local issues. How the EU chooses to invest its money in infrastructure, the economic framework it sets in the transport field and the standards it sets for polluting emissions; all have a strong impact on the social exclusion transport can cause.

While T&E is an environmental organisation, it is broadly interested in the sustainability of European transport, of which the social is one pillar. Not only do social arguments strengthen the case for environmentally superior transport, solutions are unsustainable if they are not also socially just. For

¹ The average length of a journey has increased by 42% since the early 1970s, though people make an average of only 8% more trips. The level of household spending on transport varies. In Finland, for example, they spend 17% on this one item (according to "The social situation in the EU": Eurostat, 2002).

² This term is used throughout as shorthand for the range of benefits that a contemporary European can reasonably expect to access: shops, social, cultural and leisure facilities, education, health and work.

³ This is at least partly due to planning priorities not taking public transport into account, which itself stems from town planning having been made by those with access to a private car and without an understanding of how transport policies affect social inclusion.

⁴ 2002: World Council on Sustainable Development. "The sustainable mobility project: July 2002 progress report". See p9. Link: http://www.sustainablemobility.org/publications/progressrpt_july2002.asp

this reason, T&E decided in 2002 to start working on social issues and has produced a small range of publications on the subject to date.

There would appear to be a natural alliance between those working in the social and environmental fields, as their goals appear to be similar in many ways. T&E has therefore sought contact with social groups since starting to work on social issues.

However, environmentally responsible policies in the field of transport are often seen as socially regressive, particularly in the case of economic instruments. We think these are an excellent way to improve transport's environmental performance while at the same time making the economy more efficient. Some in the social movement, however, have been less optimistic about the approach. This has led to a perception that, in transport policy at least, environmentalists and social activists were somehow in conflict over the means to be used to achieve similar ends.

We suspected that this apparent conflict could be reconciled by discussing them openly. T&E therefore held a seminar in Brussels on 19 May 2004 to bring together social and environmental thinking, with a focus on the specific example of pricing. We invited a selected group of people from the social and environmental fields, as well as representatives of the European Commission. The rest of this document is based on the story of the event, teasing out the main issues discussed and enhancing them with additional information. It goes beyond simply recording who said what, and is therefore not a standard conference report.

1. What are the social issues in transport?

Transport is socially unsustainable in three main ways.

Access. Europe's transport systems reduce access to goods and services for large swathes of the population: those who don't want a car, who cannot afford one or are forbidden from driving. Not owning a car reduces access to goods and services. How? The main problems are public transport availability⁵, cost⁶; and psychological distance⁷.

Unfair cost burden. Transport's external costs have a disproportionately large effect on the already-marginalised: the poor, the disabled, the elderly and children; increasing social exclusion⁸. Here are some examples of such costs, which have a greater impact than simply the financial⁹: the impacts of air pollution on human health; physical and mental effects of noise pollution (which are often underrated); fragmenting of communities through their physical division; road deaths and injuries.

Private car is over-privileged. People's daily mobility needs are assumed to be met largely through one source: the private car. Those who would prefer to access goods and services without one - or who have no choice can therefore find life extremely difficult. Shopping centres, sports complexes and even new schools and other amenities are typically developed with the private car in mind. The UK government's Social Exclusion Unit finds that, "Poor transport can be a result of social exclusion...[but] poor transport can also reinforce social exclusion." Although transport and social exclusion are not automatically linked, and other factors (such as poor education) may be more important, it says, poor transport can "undermine key government objectives on welfare to work, raising educational achievement and narrowing health inequalities, and has costs for individuals, businesses, communities and the state". Overprivileging the car in public investment also has significant opportunity costs: could the public money spent on the private car have been better spent elsewhere?

Some transport-related problems are more evenly distributed across society. For instance, the public health effects of a sedentary lifestyle – to which motorised transport strongly contributes – are attracting increasing attention. In the US, for instance, obesity-related problems are now one of the major causes of death.

⁵ Bad, unreliable or too distant; not to speak of being inaccessible to specific groups, such as those with a physical disability or pushing baby prams.

⁶ For example, in the UK, low-income households with a car pay almost ¼ of their expenditure on the car, and many cannot afford a car or public transport.

⁷ People with low incomes tend to be willing to travel less than broader society: for example, in the UK they travel roughly one-third (3/8) of the distance to their work which the general population does.

⁸ For example, homes near airports often house the more financially disadvantaged. Airport noise, particularly at night, puts residents at risk of sleep disturbance, reduced performance in cognitive tasks and ability to comprehend. Children are particularly at risk. A study in 2000 by two well-known research organisations estimated transport's external costs in the EU15, Switzerland and Norway − and excluding congestion − at around €530 billion. (2000, Infras/IWW, "External costs of transport.")

⁹ The financial costs also include the fact that the poor pay proportionately more for publicly funded facilities like roads and airports, which they actually use proportionately less than their more wealthy counterparts.

1.1 Why does transport remain unfair?

Just as environmentally unfriendly transport patterns persist despite good knowledge of the problems, so too socially unjust transport patterns persist. As with environmental problems, the causes are often more complex than first thought.

One cause is clearly the divide between those making transport decisions, on the one hand, and those suffering social exclusion on the other. Those making the systemic decisions are not confronted with the consequences of these decisions. More importantly, the decision-makers' social environment allows this to happen.

One major element of the social environment lies between the ears. Once people have chosen a way of getting around, they stick to it: well-established behaviour patterns are highly resistant to change (see below).

1.2 Why do people choose the car? 10

Motivating factors – psychological benefits. People get two main socially-valued psychological benefits from driving: Identity¹¹ and Control¹². Other factors do exist, but are less important¹³. Numerous actors conspire to maintain the public perception of the car as provider of these psychological benefits; and together they keep the car at the top of the transport food chain. Advertising is a good example.

Perceptions. In addition to motivating factors, people can make rational decisions to own and drive a car on the basis of positive perceptions; price, comfort, levels of stress. These are heavily influenced by the media, advertisements, and other 'high order sectors', and may be factually incorrect. Choice can also be influenced by negative perceptions of the alternatives, which, too, may or may not be accurate.

Maintaining behaviour. Why do people continue to drive, even if better alternatives are known to exist? The biggest factor maintaining behaviour is force of habit. Once people have chosen a way of meeting their mobility needs, they stick to it. Patterns of behaviour change *slowly*. There are so many different decisions to be made in a day that it is tiring to make them all consciously – so most decisions are made once only and become part of a

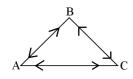
 $^{^{10}}$ Assuming, of course, that they are not too old, young, poor or disabled to be in a position to choose.

¹¹ This includes particularly the following groups of people: young people, the relatively poor, those low on the socio-economic scale and those driving small (<1.2l engine) or large (>2.0l) cars. People in the richest and best-educated parts of society are increasingly decoupling the car and success in their minds, but they are in the minority. A car is one of the most obvious public displays of personality, similar to clothing. In a way, therefore, the car can be seen as an extension of self. The model of car people buy, the colour they choose and the accessories they use are all important features, a fact picked up by advertisers. This explains, for example, why people can become so upset when their vehicle is involved in a car crash, even if nobody is hurt and they incur no financial costs.

¹² Especially people older than 40 (and within this group, women particularly). Unrestricted access and mobility, limitless individual agency: these are standard keywords in car advertising, not least because of the power of the symbol of the open road.

¹³ These include Power (feeling of power through driving); Emotional attachment (car as object of desire/love); Social cohesion (car as common interest); Territorial aspect – both as private territory (an extension of my private property) and as 'sacred space' in the sense of car use being a way of participating fully in society through adherence to a socially valued action (driving); Stimulation (driving can have similar effects to narcotics); Structured time (predictable rush hour as a chance to have time alone); Protection (car acting as a second skin, offering a private and safe space); and Masculine identity in men (can trigger male archetype, chivalrous/macho/ heroic/superior, even showing off/impressing).

stable behaviour pattern¹⁴. Changing a routine takes energy – and in the absence of an external impetus (legislation, death of a friend in a road accident, etc), it is unlikely that someone with a strongly-developed pattern of car-driving will change behaviour, even if presented with good information on alternatives.



The diagram shows how Affect (feeling), Behaviour and Cognition (thinking) influence each other. Given the power and stability of the factors maintaining the car's position as a socially desirable object, and individuals' well-entrenched behaviour patterns, A, B and C reinforce each other to ensure that the car retains its dominant position. People keep driving. And many of those who can't drive, keep aspiring to.

How many of the 'car-less' actively choose to be without one? As long as the psychological benefits remain great, and it is socially valued as something more than just a way of getting around, we can expect non carowners to want to own one. In fact, getting a 'better' car is more often a symbol of success¹⁵ than a real need.

People's choice of a particular transport mode also depends on how pleasant they think it is: how easy, socially valued, comfortable, safe, inexpensive, etc. Behaviourist theory provides a useful tool:

Positive reinforcement is when a particular action is rewarded. Over time a very strong pattern of behaviour develops, as the person comes to subconsciously associate a specific action with reward. Once developed, behaviour can be stable even in the absence of an immediate reward¹⁶. All the psychological benefits mentioned above are positively reinforced through car-use.

Negative reinforcement involves actions taken to prevent a negative consequence (I drive, because I feel frustrated and powerless when I take public transport, or my friends and neighbours think it odd if I take the bus).

Behaviour is *extinguished* when it no longer elicits the desired response (I used to enjoy speeding, but it no longer excites me). A well-established pattern can take a very long time to be extinguished: it may never be if the behaviour is occasionally rewarded.

Punishment means 'rewarding' a particular action with an unpleasant consequence (if I'm going to a job interview and am late because my bus doesn't come, I have been punished for trying to use public transport: I won't take the bus again if I have a choice). The more powerful the punishment, the more likely I am to not repeat the behaviour.

¹⁴ For example, Einstein reputedly bought many copies of the same shirt, so as to not have to choose each day. This freed mental energy for other things.

¹⁵ It is also no coincidence that Switzerland, the world's richest country, is leading the world in the concept of car-sharing, whereby people do not own a car, but rather hire one as needed for periods of an hour or longer. People joining car-sharing schemes tend to be relatively wealthy and relatively well-educated. In that part of society, car-ownership is increasingly losing its function as a marker of status or belonging, no longer gives identity benefits and feelings of control can be gained elsewhere too. It is unsurprising that Swiss public transport is of the highest quality and that using it is seen as a normal part of life for everyone.

¹⁶ Pavlov rang his famous bell before feeding his dogs; later they salivated whenever he rang the bell, even in the absence of food.

So, powerful factors press people and societies to stick with a car-based paradigm. The side-effects of this pattern are not only economically and environmentally detrimental; they are socially damaging. Experience in the health field suggests there are times when people are 'susceptible' to change and times when they are not¹⁷. For example, buying a new car is a 'window of opportunity' to reflect on car ownership; change can happen if real alternatives (public transport, car-sharing) are seen to exist.

Institutional obstacles to change. Policy-makers and institutional structures can be a key obstacle to change. The OECD reports that decision-makers often underestimate citizens' willingness to restrict their caruse and/or promote public transport by as much as a factor of four to ten¹⁸. This is reflected in the discussion on acceptability, below.

Complexity. Transport's problems have a wide range of causes, millions of people contribute to them, and they are maintained by social structures: they are complex. Yet this frequently remains unrecognised. For example, transport's inadequate response to climate change has two main effects: direct costs caused by the effects of climate change; and economic and social damage through (e.g.) loss of jobs as other sectors struggle to compensate for transport's failure to bear its share of CO₂ emissions reductions. Each of these aspects of the problem is intricate. Even when the complexity is recognised, decision-makers are often institutionally or structurally unable to deal with it (different departments and/or levels of competence). This results in adoption of partial measures that cannot possibly succeed. The corresponding policy failure leads in turn to the mistaken belief that change is impossible.

Oversimplification. For example, it is often argued that reducing transport would harm people's right to mobility, which would infringe their human rights. People's right to move should clearly be respected: so transport demand management initiatives must be scrapped. This is seductive, but grossly simplistic. The right to free movement is not a 'trump card' with which to justify all forms of mobility at all times. Even the right to free speech has limits. So, although people have a general right to physical mobility, the social (and other) consequences of *how* they exercise this right are crucial, and it must be limited by the rights of others to more basic rights, like health. It is therefore more useful to speak of an equitable *right to access* to goods and services in society¹⁹. But this takes more time to explain than referring to the right to mobility.

¹⁷ Fergusson, M., Davis, A. & Skinner, I. (1999). "Delivering changes in travel behaviour: Lessons from health promotion." IEEP, London.

¹⁸ OECD (1999). "Social implications of EST". In The economic and social implications of sustainable transport: Proceedings from the Ottawa workshop.

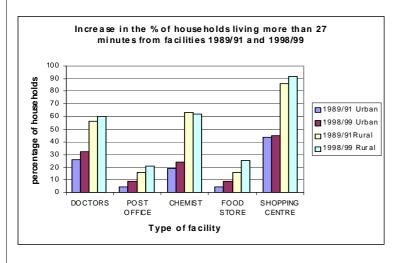
¹⁹ Once people have developed patterns of behaviour, it is difficult to encourage them to change, so improving access (a carrot) may in itself be insufficient to encourage the needed change in transport behaviour in the absence of an effective disincentive to use more polluting modes of transport (a stick).

2. Experience in the United Kingdom

Karen Lucas gave a detailed presentation on her research experience in the UK. We decided to ask her for an overview of transport, environment and society from a British perspective, because Britain has gone further to date than any other EU country in developing its reliance on the private car. Outside London, public transport has been opened to uncontrolled competition, resulting in significantly reduced public service to unprofitable routes, and there has been too little investment in rail for years. The car is the almost inevitable choice for those in a position to choose. It is therefore in the UK that other EU countries can see the potential developments in transport patterns²⁰.

Developments in the UK have been marked by a dual problem: access to goods and services for those without a car has become more difficult over time; and poor policy recognition that lack of transport is a barrier to social inclusion. Welfare policies have not sufficiently considered people's ability to access key goods and services.

Cars are both beneficial and problematic in the UK. On the one hand, they offer more freedom and choice, assist women's participation in the work place and maintain independence for older people. On the other hand, greater reliance on the car leads to dispersed and car- oriented development, a decline in alternatives (public transport, walking, cycling), and less safe and more polluted environments. In the context of poor public transport development, the car can seem an extremely attractive, even unavoidable, alternative. However, public transport has the potential to offer most of the benefits that cars are now seen to provide. Unfortunately, the framework guiding public transport works against the improvements that would be needed (see below).



Local transport schemes in the UK do not presently benefit the most socially excluded. In fact 80% of funds for such schemes is used for projects that benefit the wealthiest 20% of the population. At the same time, developments are increasingly making access to goods and services dependant upon people being able to travel.

The diagram indicates the increase over time in distance to selected goods and services.

The UK government has recognised this imbalance in accessibility and now requires local transport plans for the period, 2006 - 2011, to have accessibility planning at their heart²¹. This round of local transport plans will

²⁰ A bit like subjecting contemporary continental European transport policy to *reductio ad absurdum*.

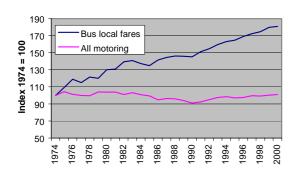
²¹ Local transport plans are a requirement for every local transport authority and are essentially a detailed bid for funding to the national government for capital transport schemes. The first plans covered the five years from 2001 and were geared towards achieving congestion reduction and modal shift.

have to demonstrate that they fulfil a social need in order to access central government funding. Local authorities will have to carry out a needs audit, comparing the ability of disadvantaged people to access services with the population as a whole. A resources audit will identify the gaps in this accessibility provision.

There was some argument in the seminar as to whether this could mean providing some disadvantaged people with cars if that was the most appropriate means of ensuring accessibility. It became clear, however, that improving accessibility does not always have to be resolved through additional transport provision – for example it may be more appropriate to fund the creation of a local amenity, to provide access without the need to travel far.

In the past, people have lived and worked in their local area and so have not had a great need to travel significant distances on a regular basis. However, changes such as the closure of coal mines, have resulted in members of local communities having to travel further to access job opportunities. As part of her work for the UK government's Social Exclusion Unit, Dr Lucas interviewed job centre managers to determine how far they expect people to travel to access employment opportunities, as well as how much of their salary they are expected to spend on travel to work (and see Footnote 7).

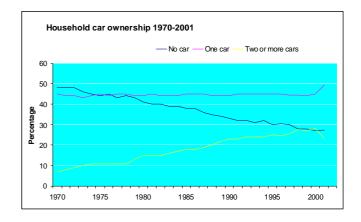
The UK is faced with an additional problem that makes social exclusion from transport more severe than elsewhere in Europe. Most bus services were deregulated in the late 1980s and are now subject to uncontrolled competition²². As a result, profitable services and routes are well-served by commercial operators, while local authorities with limited means are expected to finance services that meet a social need. There is no crosssubsidy between profitable and socially-necessary routes, making good service on the latter nearly impossible to maintain. These essential services are often not well used, and local authorities are often not good at recognising when local travel needs change. One local authority - Telford and Wrekin (in the British Midlands) – has managed to encourage operators to serve poorer estates, thereby improving accessibility and bus patronage by some 60%. But this is an exception. The framework conditions for public transport in the UK favour social exclusion. Local authorities are now keen to get some form of re-regulation, to allow a tendering system for buses similar to that in London, where an element of controlled competition does exist.



The price of bus tickets has risen substantially since the 1970s; compared with the price of motoring, which has effectively remained stable in real terms. This provides another clear reason for the socially excluded to want to have a car. Even those without a car of their own make many trips by car, using lifts from friends and family, for example, to access services. The diagram shows evolution of prices in Britain.

²² There is a clear difference between no competition, uncontrolled competition and controlled competition. For a fuller treatment of the subject, see the ICLEI/VCD public transport good practice guide: http://www.increase-public-transport.net/index.php?id=726

It is partly for this reason that car ownership in the UK has increased dramatically over the last generation. The diagram depicts this visually. Note that the number of households without a car has fallen steeply, mirroring the change in proportion of British households with two or more cars.



A national internet and phone service – 'Traveline' – is in operation in the UK, allowing users to check their itineraries for different public transport options. Such information is useful, but neither the website nor the telephone help-desk provide information on prices. The phone version is charged at local rate and calls do not last more than a few minutes, but 80% of the poorest households do not have access to the internet and so cannot access the online service. Travel training, which in its most extreme form involves professionals showing potential users how to access bus services and use timetables, also plays a role in facilitating public transport use; but is expensive.

It is sobering that the rest of Europe could follow the UK's example and choose a deregulated transport system, which has clearly failed to meet citizens' needs. London is the exception – there, much more money is spent on public transport, and provision is generally good. However, the system is extremely costly.

In countries like Belgium, people pay very high income tax, part of which is used to finance transport systems. The UK has historically had a relatively low income tax, and it seems that the British are keen to continue this tradition. That limits the amount of money available to public authorities to spend on public transport; making it even more important that the overall systems are designed to serve the public.

Although pricing is recognised as a key instrument for change, there are some doubts as to the social equity impacts of pricing.

3. What can the EU do? The controversial issue of pricing

Having analysed the issues and recognised the problems it is time to turn to what can be done. Much will have to come from the national, regional and local levels, but the European Union also has a part to play. There are wideranging debates on what exactly the EU's role could be, but these need not concern us here. One element stands out: economic instruments. Europe is extremely well-placed to set an environmentally sound economic framework for transport. The question is whether using economic instruments to move towards economically sensible and environmentally sound transport is socially unjust, as its detractors claim.

3.1 Theory

We asked T&E's resident economics expert, Markus Liechti, to explain the theory behind transport pricing. He began by explaining why accurate transport pricing is crucial – that is, prices that include the costs associated with air pollution, accidents, noise, congestion and wear-and-tear on the road network. Without accurate pricing, transport is economically inefficient and will give wrong market signals; thus perpetuating the more polluting and ultimately less socially inclusive transport modes. Drivers do not currently pay the full costs of their travel.

The theoretically elegant way to ensure that transport users pay the costs they cause is to institute social marginal cost pricing. This says that users should pay the exact costs that their transport use causes, based on the act of the individual adding an additional burden to the transport system in a particular place and time. This means that each user pays a variable amount, based on distance travelled, mode of transport used and its environmental performance, time of day travelling and place of travel. There could reasonably be a charge for social impacts. So, for example, a car-user driving through the city centre in a large and polluting vehicle will impose higher costs on society than someone driving a smaller and less polluting vehicle. If the driver joins the flow of traffic at rush hour, his/her vehicle will add to the congestion, slowing everyone down and thus causing additional costs.

However, social marginal cost pricing requires a high level of differentiation in pricing, as well as excellent information²³. People would not necessarily know the cost of their journey as they were setting out. Social marginal cost pricing is therefore very hard to implement and has, unsurprisingly, generated years of academic debate.

The reason for introducing any pricing scheme is not simply economic. It is more than an economic project to make it pay more of its costs, thus freeing up valuable public resources for other expenditure: it is also, and principally, a political endeavour. Pricing sends strong signals to companies and

²³ For example, someone setting off on their journey at 8.30am might cause different costs than if they were to start the same journey at 8am

individual consumers, encouraging a change in behaviour and thus more sustainable transport patterns.

Even a theoretically clumsy pricing system can have such an effect. The London congestion charge is a good example: cars entering a small area of London are charged a flat £5 (€7.50) per day for doing so. It is both simple and theoretically ungainly. The result has been exactly what was intended: a drop in traffic levels in and around the pricing zone and a large increase in the number of people using busses, whose capacity had been increased to cope with the expected demand. There has also been a large increase in the number of motor scooters on the road, as they are not subject to the charge. We return to this example later.

In addition to the complications associated with it, social marginal cost pricing is a political non-starter. Even in the field of freight transport, which should be more amenable to economic-rationality arguments, it has proved impossible to get support for such a system²⁴. It therefore makes sense to decide on the desired political goal and make a modest start – on the principle that it is better to have a system that is approximately right than one that is perfectly wrong. If well thought-through, a good pricing policy is an excellent way to improve the transport system, making it more economically efficient and less polluting, and if well-implemented, socially fair to boot.

3.2 Practice: Politics of pricing

Having heard the theory, it made sense to discuss the political realities facing pricing, and in particular the concerns of the public. For that purpose, we asked Tina Seidel, of the Dresden University of Technology, to give an overview of existing road pricing schemes in Europe, and those that were in the planning stage, together with input on the politics around them.

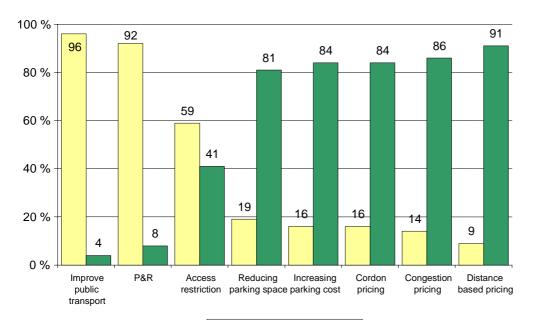
Norway (Oslo, Bergen, Trondheim), Durham and London have full pricing schemes. The Stockholm and Edinburgh schemes are in the advanced planning stage, while numerous cities – e.g. Stuttgart, Bristol, Copenhagen and Genoa – are carrying out trials. Cities like Munich and Frankfurt (Main) are considering introducing pricing, inspired by the success of the London congestion pricing scheme and spurred on by the looming deadline of national air quality legislation (based on European directives) that will require them to take some sort of action to manage travel demand.

The different road pricing schemes are at very different stages of implementation and the approaches taken, and implementation strategies, are very different from city to city²⁵. However, all pricing schemes have faced a number of common challenges, regardless of the purpose of their introduction.

²⁴ T&E proposed significant changes to the Commission's proposals on revision of the Eurovignette Directive, governing pricing for heavy goods vehicles. Although we received widespread support in general, there was nearly no support for the theoretically elegant social marginal cost pricing.

²⁵ Norway introduced pricing in the 1990s as a means of raising money for infrastructure, for example, while Durham in the UK started a small scheme in 2002 with the focus on travel demand management.

Technological and organisational issues are no longer a serious barrier: various solutions are now available. The first, and most important, barrier to pricing is acceptability and, especially, the lack of public and political acceptability.

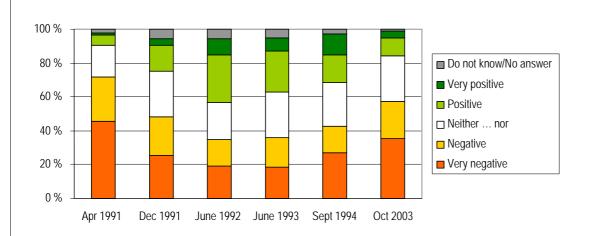


This graphic illustrates that low public acceptability is a major barrier for urban pricing schemes. Pricing is the least acceptable of all single-measure transport demand options, with only around 10-15% public support.

□ acceptable ■ not acceptable

The reason for this is that pricing is usually seen as a restriction on mobility, and therefore unfair. Many arguments against pricing focus on exactly this perception. One way of increasing public support is therefore to combine road pricing with measures such as improving public transport. Public transport and Park&Ride (P&R in the graphic above) are seen as adding mobility options. If this is combined with pricing as a package then public acceptability considerable increases. Dresden University research has found up to 45% support for a package approach (vs. 10-15% for pricing alone).

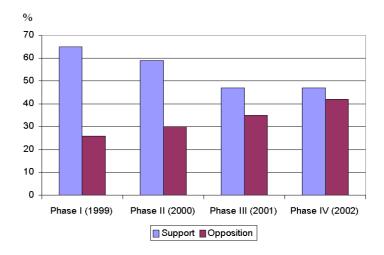
As a result, all pricing – whether extant or in preparation – are designed as a package approach; best illustrated by the London congestion scheme, which combines pricing with a significant improvement in provision of bus services, both within and without the charging zone. So this is a message which has already gone through to the responsible politicians and authorities. A second important aspect of pricing politics is that public opinion is changeable, in both a positive and a negative direction.



This figure shows development of the acceptance of Trondheim's toll ring between 1991 and 2003.

When it was introduced in 1991, 72% of respondents were against the scheme. A year after introduction, public attitudes had shifted: now only 32% were against it. This could be due to fears having been allayed as to the scheme's impact, and clarity about the use of the money. However, by 2003, a majority of the public -58% — was against the scheme. A possible explanation for this is that the toll ring was extended first in 1998 and again in 2003 to raise money for infrastructure projects.

The next figure shows the acceptability of the Edinburgh scheme in advance of implementation²⁶. The city has carried out extensive public consultation. The more the scheme has been presented in detail, the more support has decreased. For example in Phase 1 the principle of charging was presented and received over 60% support. By 2002, opposition and support was more or less equal.



Trondheim and Edinburgh teach us two lessons. First, initial support for a pricing scheme is no guarantee that the public will always support it. The more detailed the plans become the more opposition will be formed. This is common to other areas, such as introduction of the EURO or European Union enlargement. This could be because although the perceived benefits remain constant, more information means that more individual groups of people are able to see the (potential) direct costs to themselves. It is worth pointing out that this has less to do with the overall fairness of the system and more to do with the NIMBY syndrome (not in my back yard), by which people are, unsurprisingly, unwilling to bear new costs²⁷.

Second, if people see the benefits of a pricing scheme it is possible to get their support. This is also a repeated outcome of pricing trials; that participants tend to be more positive after the trials than before. This is a question of the fairness of the system.

There are six factors determining public acceptability.

 $^{^{\}rm 26}$ The scheme has yet to be implemented, as of mid-2004.

²⁷ In this regard it is worth mentioning that the London congestion charge effectively asked Londoners to pay for something they had never been asked to pay for before, and the scheme has nevertheless been able to gather support. This has a lot to do with the way in which the scheme was introduced, communicated and implemented.

First, problem perception: the public has to perceive there to be a problem in the first place. High awareness will lead to an increased willingness to accept solutions.

Second, *perceived effectiveness*: people need to see pricing as an effective way of tackling the problem. In general people do not believe that pricing alone will be able to solve traffic problems.

Third, *knowledge and awareness* of the proposed charging scheme is a precondition. People have to know and understand the measures, their aims and the ways in which they are implemented. The better the knowledge of the scheme, the higher is the acceptability. Without public consultation the public is unlikely to accept pricing.

Fourth, *social norm*: do people believe that significant others think they *should* accept pricing. When faced with new situations, people use their social environment to orientate themselves. The more favourable people's perception of general social acceptability, the higher the acceptability will be. Advertisements help to create the social environment.

Fifth, fairness. In general, pricing is not perceived as fair, as it is seen as a personal outcome or disadvantage. You have to pay for something that was previously free of charge to you individually. But if authorities are able to show that society as a whole gets something back for the money spent, citizens are more willing to pay.

Sixth, *use of revenue*. People want the money generated to be used for the transport system so as to guarantee mobility. They do not trust pricing schemes that use the money for the general budget. The most popular use of revenue is to improve public transport or reduce fares. Extending road infrastructure is very much secondary.

Political acceptability is different from *public* acceptability, and our knowledge is not as well developed in this field. There are two main reasons for this. First, politicians are reluctant to submit to academic study. Second, evaluations have focused on the impact of pricing on various specific issues (traffic, public opinion, the business sector), rather than on the political implementation process.

What *is* known is that politicians are the key actors in implementation. They determine whether a pricing scheme will happen at all, and then they have considerable influence over the timing and speed of implementation.

Politicians have two different way of influencing the policy process. First, directly: through responsibilities as ruling party or opposition. For example the former local government in Copenhagen was moderately positive towards road pricing and set up a process to establish a plan for introduction; which was supposed to be finished in 2004. However, in 2001 a new local government came to power and soon decided to abandon any plans for road user charging.

The more indirect way is illustrated by Bristol. No party won a majority in the 2003 Bristol Council election. There was no clear political commitment to road user charging after the changes in political constellations. As a result the issue dropped out of the headlines and the implementation process has slowed considerably.

Political opinion acts as a benchmark for other stakeholders. A clear commitment shows them that the framework for discussion is not of *whether* there will be pricing, but rather of *how* it will happen in practice. In such a situation, interest groups work to influence the outcome of the scheme. But when the basic commitment is lacking, groups opposed to pricing see a chance to prevent the system from happening at all, and act accordingly.

As with public acceptance, perception of fairness is important for political acceptability. Politicians are aware that people see pricing as an unfair allocation mechanism. It is fair to say that they are genuinely concerned that people are priced off the roads.

A disadvantage of pricing for politicians is that it can appear extremely risky: voters do not attribute the benefits to them, but do blame them for any costs or disadvantages. This makes road pricing a personally dangerous and therefore unattractive option for politicians, compared to direct interventions such as Park&Ride schemes and improving public transport.

It also seems that politicians regularly underestimate the public's willingness to accept pricing. For example, 84% of the public gave priority to public transport over cars in a European survey, but politicians estimated only half this level of support for public transport.

Research carried out by Dresden University indicates that politicians' perception of political issues, including road pricing, corresponds very well to the media's assessment of the situation. For this reason, researchers there have started to distinguish between *public* opinion and *published* opinion.

This reflects the role of the media more generally. They are an important mediator between politicians, the public and other stakeholders. They influence public perception of road pricing by choosing which aspects to present, and how to do it. In practice, media coverage is usually negative, or neutral at best. The University of London published a report recently showing this for the London charging scheme. Dresden University research has come to similar conclusion in evaluating implementation of pricing in several cities within PROGR€SS, a European project. Media coverage therefore seems to be another barrier, albeit one that has not received much attention.

It is clear from the available evidence that political commitment and public acceptability are, in most cases, the biggest predictor of success or failure of a road pricing scheme.

4. Unfair?

After the background information, and the theory and political realities of pricing have been discussed, we come to the question of whether

Is road pricing in fact socially unjust, as critics claim?

It is worth pointing out that political will and public acceptance are not directly related to whether a pricing scheme is *in fact* socially fair or not. Public *perception* of fairness and public desire for revenue to be used principally for public transport determines whether or not a scheme is broadly accepted. As the London scheme has shown, excellent public information²⁸ and thorough public debate can strongly influence perception and help to overcome the tendency of published opinion to be against pricing projects.

It is useful to turn to the evidence. A key element of Dr Liechti's presentation was that there will always be a potential social problem attached to road pricing: the wealthiest will always be in a position to pay extra charges, whereas the poorest will not. Such a potential imbalance therefore needs to be overcome before pricing is socially just. There are, however, a number of ways this can happen – investing in public transport with the revenue raised, providing additional local services, exempting the socially disadvantaged from fees and paying direct subsidies are some examples.

Dr Lucas concurred, arguing that there are presently insufficient mechanisms to address environmental and social concerns in an integrated manner. Her concern was that policies on reducing traffic growth do not adequately consider social equity issues.

As with most other tools, pricing therefore seems to be, *a priori*, neither socially just nor unjust. As discussed and presented at the seminar, pricing schemes' performance depend entirely upon their design. Experience leads to the conclusion that road pricing schemes can be *both* environmentally sensible and socially responsible, if done intelligently. To suggest otherwise would be to fall victim to ideology, or to use simplistic argumentation on fairness to disguise other motives for opposing pricing.

The London congestion charging scheme shows in practice that socially sensitive charging is possible: private vehicles pay a charge to enter central London and the revenue thus generated is used to improve the public transport service, which is available to all Londoners. Ken Livingstone, London's famously left-wing mayor, came to office promising to introduce a congestion charge, and was re-elected in May 2004, largely for having delivered on his promise²⁹. Note that the London charge meets all six determinants of public acceptability.

 $^{^{\}rm 28}$ On the scheme and on the use to which the revenue was to be put.

²⁹ Political commentators have pointed out that this was despite the penalty inflicted upon the Labour party (which he had recently rejoined) as punishment for its national and international policies.

Individuals, interest groups and stakeholder organisations can play a strong role. By engaging in the planning stage of a pricing scheme, they can ensure that the specific system under discussion does not increase social exclusion. They can also block unfair pricing ideas. Pricing in cities is effectively an exercise in encouraging behaviour change. For that reason, public acceptance is needed and planning should involve those affected by the decisions. The alternative in a democratic society is policy failure. Having said that, decision-makers would be wise to keep discussions as facts-based as possible. As discussed earlier, the public does not always support good ideas to begin with, and discussions on pricing do not always engender rational discussion.

The road user charging scheme in Bristol illustrates the latter point nicely. There, the proposed charge met with opposition from precisely those groups without a car. The revenue was to be used for additional public transport services, and socially excluded people would in this case benefit most directly from the charging³⁰. The reason non-car-owners opposed it was their aspiration to car-ownership: should they in the future own a car, the charge would affect them. Therefore they were against it; notwithstanding any immediate-term gain. Clearly, more is at stake than meets the eye – remember the ABC triangle above – and the psychology and cultural issues surrounding the car must be taken into account in considering any pricing plan³¹.

The seminar was originally called, "Uniting environmental and social transport policies". It quickly emerged in discussions during the seminar that there was no *automatic* unity of the sort implied by the title. Nevertheless, it became clear that there certainly is great scope for cooperation; hence the title of this report, "Reconciling environmental and social transport policies". Such cooperation is tricky, but is clearly possible³².

From the European perspective, it makes sense to set the economic framework for pricing, while leaving the details to the individual member states. This will help move European transport towards economic efficiency and environmental soundness, whilst allowing member states to create systems and use the revenues in the way that best fits with their specific social needs. A change in mindset at all levels, from a focus on providing mobility to one concerned with providing access for all citizens, would be a good start.

³⁰ Dr Lucas was swift to point out that in the UK, not having a car very often equates to being socially excluded, for the simple reason that so many services are designed for the private car.

³¹ See Anastasiadis (2002) for more detailed treatment of these issues. It is worth noting that much public opinion that had been against the London scheme turned in its favour once it had been shown to work. This is the result of a natural inertia.

³² Just a few months earlier, environmental and social groups had cooperated with trade unions to provide input to the EU's 2004 Spring Summit, in the field of investment. A conference in February 2004 was followed with a manifesto, "Investing for a sustainable future" and a good practice guide, "From best practice to common practise". Transport received significant treatment in all fora.

Annex I - Further reading

Adams, J. (1999). The social implications of hypermobility. In, OECD Working Party on Pollution Prevention and Control, Working Group on Transport, Project on Environmentally Sustainable Transport. The Economic and Social implications of sustainable transport: Proceedings from the Ottawa workshop. Paris: OECD. ENV/EPOC/PPC/T(99)3/FINAL/REV1

Anastasiadis, S. (2002). <u>Transport & Society: Transport sustainability's poor cousin</u>. Brussels: European Federation for Transport and Environment.

Banfi, S., Doll, S., Maibach, M., Rothengatter, W., Schenkel, P., Sieber, N., & Zuber, J. (2000). External costs of transport: Accident, environmental and congestion costs in western Europe. Zürich/Karlsruhe: INFRAS/IWW

Fergusson, M., Davis, A., & Skinner, I. (1999). <u>Delivering changes in travel behaviour: Lessons from health promotion</u>. London: Institute for European Environmental Policy.

Organisation for Economic Cooperation and Development. (1999). "Social implications of EST". In, OECD Working Party on Pollution Prevention and Control, Working Group on Transport, Project on Environmentally Sustainable Transport. The Economic and Social implications of sustainable transport: Proceedings from the Ottawa workshop. Paris: OECD. ENV/EPOC/PPC/T(99)3/FINAL/REV1

Social Exclusion Unit. (2002). <u>Making the connections: Transport and social exclusion</u>. Interim report. Available online at: http://www.socialexclusionunit.gov.uk/transport/transport.htm

World Business Council for Sustainable Development (2002). <u>The sustainable mobility project: July 2002 progress report</u>. Available online at: http://www.sustainablemobility.org/publications/progressrpt_july2002.asp

Annex II - Seminar agenda

UNITING ENVIRONMENTAL & SOCIAL TRANSPORT POLICIES

Information on the links between transport and social exclusion

When? Wednesday 19 May 2004

Where? *Maison des Associations International*, Rue Washington 40, Brussels

Brief overview: Environmentally responsible policies in the field of transport are often labelled as socially regressive. Nowhere is this more true than in the field of economic instruments to reduce environmental damage. For this reason, T&E will hold an information seminar on transport, environment and society, with a focus on the specific example of pricing.

Programme

10h00	Registration
10h30	Welcome
10h45	Introduction: Transport, environment and society – overview
	Speaker: Karen Lucas, University of Westminster
11h25	Tackling controversial issues, addressing specific concerns
	Theory of pricing in transport.
	Speaker: Markus Liechti, T&E
	Politics of pricing
	Speaker: Tina Seidel, Dresden University of Technology
13h00	Lunch

Annex III - List of registered participants

T&E Social Seminar Registered Participants 19/05/04

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ABOUT THIS PAPER

European societies have experienced great change over only a few generations. One of the most important of these has been an increase transport volume. The result? People travel further and households spend more on transport.

This has brought a range of associated problems. The environmental issues are well-publicised, and the economic arguments have been thoroughly discussed. But the social aspects of transport's phenomenal growth have undergone rather less scrutiny.

There is a European angle to this issue, which at first appears to be purely national, or even local. Although T&E is an environmental organisation, sustainable solutions require also the social pillar. Therefore T&E started working on social issues in 2002 and has produced a small range of publications on the subject to date. There seems to be a natural alliance between those working in the social and environmental fields, and T&E has sought contact with social groups.

However, environmentally responsible policies in the field of transport are often portrayed as socially regressive, particularly in the case of economic instruments. This has led to a perception that, in transport policy at least, environmentalists and social activists were often in conflict.

T&E therefore held a seminar in Brussels on 19 May 2004 to bring together social and environmental thinking, with a focus on the specific example of pricing. We invited a selected group of people working on social and environmental issues. This document is based on the story of the event, teasing out the main issues discussed and enhancing them with additional information. It goes beyond simply recording who said what.

ABOUT T&E

The European Federation for Transport and Environment (T&E) is Europe's principal non-governmental organisation campaigning on a Europe-wide level for an environmentally responsible approach to transport.

The Federation was founded in 1989 as a European umbrella for organisations working in this field. At present T&E has some 40 member organisations covering 21 countries. Members are mostly national organisations, including public transport users' groups, environmental organisations and European environmental transport associations ('Verkehrsclubs'). These organisations in all have several million individual members. Several transnational organisations are associated members.

T&E closely monitors developments in European transport policy and submits responses on all major papers and proposals from the European Commission. T&E frequently publishes reports on important issues in the field of transport and the environment, and also carries out research projects.

More information about T&E can be found on the web-site: http://www.t-e.nu. This includes a comprehensive list of all publications and position papers, and free access to the *T&E Bulletin* and news releases.

A full list of T&E's members is available online, including links to their websites.