

Abbreviated version

T&E 02/1, Transport and the economy: The myths & the facts. This version for ONLINE use only

MYTH 1: Transport is the motor of the economy. *Page 6*

MYTH 2: Building roads is always good! *Page 8*

MYTH 3: You can't stop traffic growth! *Page 10*

MYTH 4: We mustn't try to reduce traffic. *Page 12*

MYTH 5: Congestion can be solved by road building. *Page 14*

MYTH 6: Car drivers want more roads. *Page 16*

MYTH 7: More cars mean more freedom. *Page 18*

MYTH 8: Road pricing will frustrate economic development. *Page 20*

MYTH 9: Charging the right price for car travel will lead to more inequity. *Page 22*

MYTH 10: We should build more roads. *Page 24*

References and further reading *Page 26*

T&E publications *Page 27*

About this paper *Page 28*

Introduction

"Whatever people might say about building roads, you can't doubt that it's good for the economy, can you?" Well actually you can. And you should. And those who understand the link between transport and economy do doubt that building more infrastructure is always good news. But the fact that the above sentence is so often uttered shows just how difficult it is to argue against an accepted piece of "wisdom", even if that "wisdom" happens to be at best dubious and at worst simply wrong.

That is why T&E wants to highlight why some of the "wisdom" about road transport being good for the economy is not wisdom at all but myths. In some cases they are myths born of good intent but false assumptions. In other cases, they are myths deliberately spread by those who have a vested interest in the unchecked growth of road transport and don't want social or environmental reasons to get in the way.

But just in case you think it's just a few people in the environmental movement who think there are a lot of myths surrounding the idea that road building is good for the economy, take a look at the statements above. The message here is that an automatic assumption that building roads will bring economic benefits cannot be justified. And

if the alleged direct and indirect benefits of road transport to the economy continue to go unquestioned, all sorts of decisions will be made on false premises which will lead to further massive damage to the environment and society, just at a

time when there is widespread recognition that sustainability has to be the guiding principle.

We invite all politicians, officials and other decision makers to take note of the 10 myths in this brochure. Reading them will not necessarily bring about easy answers. But it is important not to believe - as so many decision makers are encouraged to do - that building more infrastructure is always a good answer. It frequently isn't, as the following pages testify.

Our media culture favours ideas that can be condensed into short soundbites, soundbites such as: "Building roads will create jobs, regenerate this depressed region and be good for the econ-

omy in general". But it doesn't make them correct. The truth is often more complex.

Beatrice Schell

Director, European Federation for Transport and Environment (T&E)

"Whatever one's views, there is certainly sufficient contrary evidence to counsel against blindly attributing large indirect benefits to public investment."

J. Girard and C. Hurst, European Investment Bank, July 1994 ¹

"Building infrastructure is not the only answer. In many cases indeed, it has become an increasingly unrealistic option because of its costs, both financial and environmental."

Neil Kinnock, European Commissioner for Transport Helsinki, June 1997 ²

"Without adequate programming there is a risk that available funds will be disbursed without achieving, in most regions, the minimum level of performance that the basic transport system should provide or the synergies expected from its integration."

Dr M. Turró, European Investment Bank, Helsinki, June 1997 ³

Transport is the motor of the economy? Not true!

Who says? There is no evidence for this, in fact economists are increasingly coming to the conclusion that there is no automatic link between transport and economic growth, and in fact if we view transport as just another component in a business - like labour or energy - it will lead us to use it more efficiently, and everyone will gain.

Advocates of road schemes frequently say it is necessary to promote transport because transport is the motor of the economy, so increasing transport will stimulate economic growth.

The argument is essentially that transport growth and economic growth are inexorably linked, that facilitating transport growth automatically stimulates economic growth. But there is no evidence to support this. It is true that transport has grown over a period of economic growth, but this has not been at the same pace of economic growth. Recently transport growth has even been faster than economic growth, resulting in ever greater amounts of transport for additional GDP.

Moreover, the amount of transport needed for one per cent of GDP varies massively across the developed world. OECD member states demonstrate a huge variability of this "transport intensity" in their economies. If an automatic link between transport and economic output did exist, the explanation for this apparent anomaly would have to rely on the characteristics of the countries. Yet those countries that are otherwise similar in terms of distance from a core economic zone, population density and level of economic development (eg. Ireland and Spain) have very different levels of dependency on transport. The evidence therefore refutes an automatic link between transport and economic growth.

Those who have studied this question, particularly economists, believe there is indeed no automatic link. This was one of the main conclusions of the British government's "Sactra" (Standing Advisory Committee on Trunk Road Assessment) report on transport and economy⁴. It argued that breaking the cycle of ever increasing transport growth could *benefit* rather than harm the economy. Correcting existing market distortions could decrease the economy's dependence on transport, increase the efficiency of transport use and promote higher welfare. After all, transport is largely an economic sector whose demand is derived from what it can aid to production, rather than a product that has genuine utility by itself.

We should view transport like other inputs to our growing economy by ensuring we use as little as possible for as great a benefit as possible, rather than simply trying to use ever more and more transport without regard to how efficient it is. We need to be as efficient with its use as we are with resource consumption, energy use, or labour productivity.

Building roads is always good? Not true!

Unfortunately not, in fact quite the contrary. New roads can frequently take business out of a depressed area, making it even more depressed. And if a new road opens up connections to large centralised businesses, those businesses will be able to spread their wings into these peripheral areas and make it hard for smaller local businesses to survive.

A constant theme from those proposing road construction is that roads are needed for the economic development of a region, especially those regions far from the centre of markets. The secondary message is that roads are good value for money as they always create jobs. Both are a fallacy.

Roads do not always create jobs and when they do it is not always in the peripheral areas of the economy where the economic development is most desired. In fact following the construction of a road there is evidence that large businesses no longer need to undertake operations in more remote areas and can use their large-scale centrally located operations to supply the peripheral market now easily accessible. In these circumstances the road aids the economies of scale of a large enterprise but in so doing reduces employment in the peripheral area.

Another scenario happens when a new road link gives large enterprises access to peripheral markets where they had previously not been active. Local businesses then find it hard to compete with the large-scale enterprise with its economies of scale. These local businesses then either have to find economies of their own by reducing costs - which normally means reducing the work force - or they go out of business entirely. Thus in remote locations that either already have or do not have large-scale enterprises active in their area, the opening of a new road is a potential threat to their economic development and well-being, not a boost.

It is the characteristics of an individual area, its economy and the nature of the road that will determine the economic impact of a new road. There simply is no hard-and-fast rule that says new jobs will flow from road construction.

Whether road construction represents good value for money really depends on who you ask. Investments of public money into infrastructure certainly offer good value to large-scale enterprises when the infrastructure is frequently free for them to use and maximises the market advantages of their current investments. But they certainly are not good value for money for citizens of remote areas when they can increase local unemployment.

You can't stop traffic growth? Not true!

Well you can, and experience suggests it will benefit most people. When bridges and other links have been closed, traffic levels have dropped and local quality of life has improved. And if the price gets too high, people look for alternatives to car journeys.

The argument that the growth of traffic is somehow preordained is almost ecological. It is as though those advocating road construction view traffic as some sort of natural organism, the population of which will naturally increase in some Malthusian or natural fashion.

However there is evidence that, far from being inevitable, this growth in traffic can be stopped and even reversed. In fact this can actually be achieved at the same time that economic and social well-being increases.

Halting the growth in traffic can happen at both a local and more general level. In areas where important fixed links, such as bridges, have had to be closed for maintenance, the temporary absence of infrastructure has decreased traffic. When this has happened, local conditions and the quality of life for local residents have improved. Pedestrianising urban centres is an obvious way to reduce traffic, and pedestrian-only schemes frequently lead to an increase in shopping trade (see *myth 4*).

Some road advocates argue that in these cases the traffic has merely been transferred elsewhere. While there is some evidence for this, there is also evidence that traffic in the overall urban area has in fact decreased.

More general examples of traffic are harder to find because of the reticence for taking action to achieve a reduction in traffic demand. Yet they do exist. For years the city of Copenhagen had traffic levels that remained static. Local policies encouraging public transport and cycling, allied to high city centre parking charges and traffic management, meant that despite continued growth of the city it was able to retain the same level of traffic. This only ended when the bridge across the Øresund strait to Malmö in Sweden opened and traffic grew with the addition of longer distance and transit traffic.

Other examples are found from the impact the fuel price rises in 2000 had on traffic demand in some European countries. Despite transport demand being supposedly rather insensitive to price rises, traffic levels in France remained static at 1999 levels despite being expected to increase before the fuel price rises. While a drastic rise in fuel prices - and the high price instability - could not be adopted as a rational policy response, the example does illustrate that transport growth can be curbed. This was another major finding of the British Sacra report (see *myth 1*).

Reducing traffic will harm the economy? Not true!

The evidence suggests the contrary. Where pedestrianisation has been tried, it has generally led to more shopping trade, not less, and many shopkeepers who begin by opposing the pedestrianisation scheme end up being its biggest beneficiaries. At least three studies have shown that reducing traffic in towns and cities is on average better for the local economy compared with urban areas where traffic continues to run through.

It is often claimed that less road traffic will mean less economic activity. These claims come from all parts of the economy, but they generally provoke most attention in cases when a proposed pedestrianisation scheme in a shopping area is opposed by retailers who fear the reduction in traffic will lead to a reduction in their business. But is there any evidence to back up these concerns? And could it be that a reduction in road traffic could benefit trade?

In the late 1980s, a proposed pedestrianisation of the centre of the French city of Grenoble was fiercely opposed by local shop owners, but the scheme was pushed through by the city authorities. A year after the pedestrianisation was completed, a survey found that shops had reported an average increase of 20% in trade. Was this just a freak case with special circumstances? Since then a number of studies have suggested it wasn't.

Research carried out by the German Institute for Urban Research⁶ indicates that a sustainable transport approach benefits trade in German towns. It says: "Retail trade in central city districts increases with policies that encourage environmentally friendly transport modes. Of the 38 cities studied, 14 had above average retail growth. Of these 14, 10 had below average provision of infrastructure for the car."

Another German study⁷ showed there was no relationship between the amount of car parking provision and the amount of money people spent in shops. And a study⁸ looking at pedestrianisation in German and British cities concluded that not only could one expect a substantial increase in pedestrian numbers after motor traffic had been excluded, but retail turnover could be expected to increase compared with the turnover in similar shopping areas that had not been pedestrianised.

So in general, the argument that traffic reduction initiatives will damage retail trade is a myth. In fact opposition to traffic reduction schemes - whether it comes from retailers or not - could be damaging not only to the environment in terms of pollution and noise, but also the potential gain in retail trade brought about by schemes such as pedestrianisation.

Congestion can be solved by road building? Not true!

All the evidence suggests road building can't solve congestion because it generates more traffic, so the problem of congestion will never go away. Building road infrastructure inflates transport demand just as printing money creates inflation. Fortunately, the reverse can also be true - if you close off transport infrastructure, the demand often disappears. So we must get away from the idea that building a new road can ease congestion - it will probably create more.

A natural reaction to congestion is that there is not enough space for all the people that want to use roads. The argument runs: if only there were more infrastructure and thus more space, the congestion would disappear. Unfortunately this argument is no better thought through than the argument that that if only everyone had more money we would solve poverty so let's print some more money!

Building transport infrastructure inflates transport demand just as printing money creates inflation. The fact is that transport demand has always grown faster than traditional traffic projections. This is because these projections have merely extrapolated trends of growth from the past into the future and have not taken any account of the impact on demand that an increased supply of road space may have.

Traffic increases as more people decide to go by road because of the increased opportunities a new road provides. This is effectively one of the basic economic principles: a supply creates its own demand.

Studies⁹ have confirmed that not only does traffic increase beyond projections if new roads are built, but that even the reverse can be true. Traffic demand sometimes "evaporates" when road space is restricted or links such as bridges are closed.

A much more rational response to congestion problems is therefore to analyse what is causing the congestion in the first place. Road space and configuration may be one part of the problem, or it may not. Other factors are certainly going to be relevant and may be more relevant than road space. These include the availability of public transport alternatives, the relative locations of work places and residential urban areas, feelings of (in)security for children walking to school or others visiting shops, as well as the space given over to cyclists and pedestrians.

One of the best solutions to relieve congestion is the introduction of an advanced kilometre charge, which will also help improve the environment.
(See for more information www.t-e.nu/pricing.htm)

Car drivers want more roads? Not true!

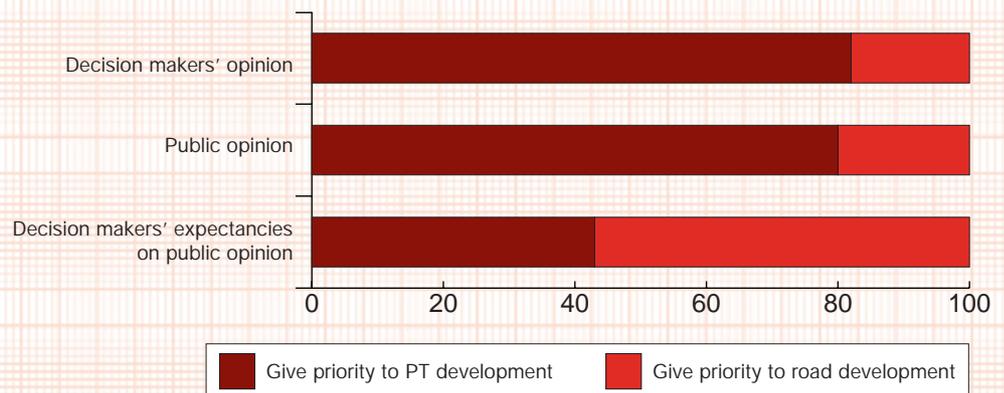
This is a judgement made on the basis of a dangerous assumption - that the amount of driving that takes place reflects people's desire to drive. It could be a reflection of unviable alternatives. And a major study into whether people want public transport or cars to dominate transport policies showed that a large majority want public transport, but politicians think they don't!

In general, decision makers draw a conclusion from growing traffic volumes and car ownership: that people want to drive more. It is as if driving a car automatically means voting for more roads, parking spaces and other car-related facilities. Some governments even earmark the revenues from fuel excise duties for road building and allocate other car-related revenues directly for improving access by car.

Existing transport demand and modal choices reflect neither the needs nor the wishes of people. Nor does people's growing income automatically mean higher demand for cars. Excessive growth of car traffic might in fact be a judgement on alternative modes (either the lack of them or that they are of poor quality), a result of the decline of locally based shops and other services, or perceived insecurity as a pedestrian or cyclist. This creates car dependency, and investing even further in road infrastructure undermines the principles of sustainable access and equity.

In a sociological study conducted by Socialdata¹⁰ in 1991, European decision makers and citizens were asked to rank their preferences between developing car orientated and public transport orientated development. The study showed that both decision makers and citizens put public transport first (84% of citizens, 86% of decision makers). But when the decision makers were asked what they had thought about citizens' attitudes, the answers showed that politicians misinterpret citizens' wishes - the politicians thought that only 50% of citizens would give priority to public transport investments.

ATTITUDES OF EUROPEAN DECISION MAKERS AND CITIZENS TOWARDS DEVELOPING PUBLIC TRANSPORT AND ROAD INFRASTRUCTURE



More cars mean more freedom? Not true!

The facts suggest otherwise. In general the costs of car use are very expensive, but even if the car user is happy to pay for those, what about the costs to society? And what about the freedom of those people who don't have cars or can't drive? The freedom to drive (which doesn't seem too great when drivers are stuck in traffic jams) has brought about a decline in services for those who don't drive, so it's one person's freedom at the cost of another's.

There is no doubt that the car has brought increased freedom of choice about where and how to travel. It has brought a wider radius of action for individuals. However, this has come at a cost.

Firstly, for an average family to fulfil its mobility requirements by using a car in an area of even modest public transport, the costs are much higher compared to using public transport, taxis, cycling and walking when the full costs of running a car are taken into account. Of course time is an important factor and there are often time savings to be made by car, but unless public transport is really bad, these time savings will be low, yet the cost of them considerable - to both the family and society in general. This leaves the family with less money, and thus less choice about how to fulfil other needs, and society facing greater pollution, noise and other environmental problems.

Secondly, the car has limited the freedom of many specific groups in society. Taking figures for the UK, more than a third of all households do not own a car, four out of five elderly people living alone do not have a car, and half of all women do not have a driving licence. The overall effect of the continuous policies in favour of cars has meant an ongoing decline of the freedom of choice for non-car users (and indeed car users too) in terms of accessibility to goods and services.

The years of pro-car policies practised by most authorities have encouraged developments which limit freedom like out-of-town retail estates and low density residential areas, both often badly served by public transport. This has undermined the viability of small-scale shops and services - like butchers, post offices and healthcare - in residential areas. Where people used to be able to get their goods and services nearby, they now need to travel much further to get to the same basic facilities. This leaves them with less freedom of choice about where and how to cater for their everyday needs.

Thirdly, policies favouring car use have contributed to a further decline in the level of basic service by public transport. This diminishing public service has severely limited the freedom of mobility for large already disfavoured groups in society. This process is still continuing and needs to be reversed. If it isn't, ultimately public transport will collapse, congestion will continue to rise, and the transport system will end in gridlock.

Road pricing will slow economic development? Not true!

No it won't! Road pricing is an attempt to charge accurate prices for use of certain roads, and when you have accurate prices - in other words an elimination of market distortions - you stimulate the economy. If accurate prices are charged, there will be incentives for cleaner technology, better public transport, better use of land and more thinking about how and when to use transport. That doesn't sound like frustrated economic development.

The role of transport in the economy is comparable with that of energy - without it, the economy grinds to a halt. But, as we have learned from the energy sector, it is uneconomic to use too much. Energy conservation and using exactly the right amount of energy are the best ways to stimulate the economy. The same holds for transport.

The best way to find the right amount of transport is to leave it to the market and refrain as much as possible from unnecessary market interventions. Like with energy, distortions in the market - for example giving subsidies to certain users, or giving them the possibility to have a subscription for cheap energy - over-stimulate use, at the wrong times, and in the wrong places. Thus today's transport is too expensive for the economy. It generates a lot of external costs. These are real costs for society. Currently everybody - whether they have caused these costs or not - pays the bill, mostly through general taxes. Transport users are getting wrong signals through an artificially low price of transport. Correcting those signals, for example by using road pricing, will stimulate the economy, not hurt it.

If the right price is charged, the market will display its full capacity to bring supply and demand together. Authorities, private and company car drivers, car manufacturers and operators of public transport would then have market incentives to:

- introduce and buy cleaner and fuel-efficient technology,
- switch modes when appropriate (about half of all trips are under 5 kilometres)
- make better use of logistics (for example car pooling)
- rethink their car ownership when it is next time to do so
- offer better public transport (since the unfair advantage for cars would have been removed)
- make better use of land
- reduce unnecessary movements.

All these reactions will stimulate the economy.

Charging the right price will I increase inequity? Not true!

This is often the claim of those driving the biggest cars, but if accurate prices are charged, those who drive the biggest cars and the longest distances will pay more. Conversely those who drive smaller cars with better fuel economy will pay less. This is greater equity, not inequity.

"Won't the introduction of charging the right price for car travel hurt poor people the most?" This is the point that always seems to be made by the executives and representatives of industry when they attend conferences on charging the right price for car travel. It is of course comforting to know that those who drive BMW's, Porches, Mercedes etc are so concerned about the well-being of the ordinary person driving a small car. But regardless of the sincerity of their contributions, is there a real potential problem that should prevent us from introducing the right price for car travel?

The problem is quite limited. Charging the right price would mean motorists picking up the bill that is currently being paid by all citizens through general taxes. These general taxes could be reduced if car drivers were to pay for the costs of their driving. Charging the right price means that driving big, gas guzzling and polluting cars will become much more expensive per kilometre. In addition, people driving more kilometres will pay more. Therefore every tax payer would get a bonus, and the largest share of the bill for car drivers would be paid by those owning the largest cars and driving the largest number of kilometres. This is a system that would lead to more equity, not less.

Even if there were the problem that, because of the new charging system, there were some individuals from low income groups that had to pay more than they do now, the state could always compensate those individuals for that if it saw social reasons to do so. There is therefore no good reason not to introduce the right price for car travel.

For the record, it would actually be unhelpful to give low income groups a lower price per kilometre, for this would undermine the intention of the new system. If the state deems it necessary to compensate those groups, then this should be done through other means that do not undermine the system, e.g. by a reduction of the general taxes for underprivileged groups.

We should build more roads? Not true!

Just because there is space - and that is questionable - doesn't mean it should be filled with new roads, as that will create problems for the people of the CEE countries. These countries have good rail networks which are being underused because they have fallen into disrepair and need overhauling. It is much better to help rebuild CEE transport infrastructure around revitalised railways than building new roads through unspoiled areas of ecological importance.

There is a belief which seems to dominate thinking in the European institutions and industry that the opening of the economies of countries in Central and Eastern Europe (CEE) will lead to more trade and more need for transport, which in turn will require more capacity in transport infrastructure. This belief is accompanied by the assumption that these countries have scarce and poor infrastructure, which is setting back economic integration.

In fact, transport infrastructure in accession countries is fairly comprehensive outside areas of low population density or low economic activities. In particular, the rail network was designed to carry twice or three times the amount of freight that it carries today. The problem is the quality of the infrastructure. Tracks are deteriorating and the roads are unfit for heavy lorries.

Traffic density surveys reveal that most traffic is internal and transit traffic is minor compared to total traffic levels. And while it may be true that the motorway density in CEE countries is generally less than that in the EU, is that really a reason for a slower pace of economic prosperity than if there were more motorways? CEE countries are already suffering economic and environmental damage as a result of increased long-distance road traffic, and they must be allowed to develop healthy transport systems with sufficient stress on railway development.

Accession countries also have a lot more nature reserves and untouched landscape compared to EU member states. While there are some unspoiled areas in the CEE countries which may be of low ecological value, most of the planned routes will plough through mountainous areas with specific ecosystems. A lot of these regions are particularly valuable for their wildlife and general biodiversity - some of them are home to species which have virtually died out in large parts of the EU. Such areas are not development sites but should be treated as invaluable nature assets, for the full benefit of the inhabitants of these countries and the Union as a whole.

References and further reading

- 1 Girard, Jacques and Hurst, Christopher. European Investment Bank, EIB Papers No 23, July 1994
- 2 Kinnock, Neil. European Commissioner for Transport, Speech to the Third Pan-European Transport Conference, Helsinki, June 1997
- 3 Dr Turró, Mateu. European Investment Bank, Speech to the Third Pan-European Transport Conference, Helsinki, June 1997
- 4 SACTRA, The Standing Advisory Committee on Trunk Road Assessment, Transport and the Economy, DETR, London. August 1999, ISBN 011 753507 9
- 5 OECD, Organisation for Economic Co-operation and Development, Indicators for the Integration of Environmental Considerations in Transport Policies, Series on environmental Indicators, OECD 1999.
- 6 'European Sustainable Cities Report by the Expert Group on the Urban Environment' (Commission of the European Communities: 1996, pp. 176); quoted in Whitelegg, John "A guide to achieving traffic reduction targets in England and Wales" (Friends of the Earth: 1997).
- 7 Baier, V.R. and Schaefer, K.H. "Innenstadt-verkehr und Einzelhandel", der Stadtetag 8 (1997, pp. 559568).
- 8 Hass-Klau, Carmen: "Impact of Pedestrianisation and Traffic Calming in Retailing", Transport Policy 1(1); quoted in Standing Advisory Committee on Trunk Road Assessment (SACTRA) "Transport and the Economy" (UK Department of Environment, Transport and the Regions: 1999).
- 9 *Inter alia*: Standing Advisory Committee on Trunk Road Assessment, Trunk Roads and the generation of Traffic, HMSO, London. 1994
- 10 Socialdata. Einschätzungen zur Mobilität in Europa. Internationaler Verband für Öffentliches Verkehrswesen. Socialdata. Institut für Verkehrs- und Infrastrukturforschung. München. Januar 1992

European Environmental Agency, Are we moving in the right direction? Indicators on Transport and environmental integration in the EU, Environmental Issues series no. 12, EEA, Copenhagen, 2000 - ISBN 92-9176-206-8

More information on the OECD project EST on Environmentally Sustainable Transport can be found at <http://www.oecd.org/env/transport>