

A Non-Technical Paper on the Case for Road Pricing

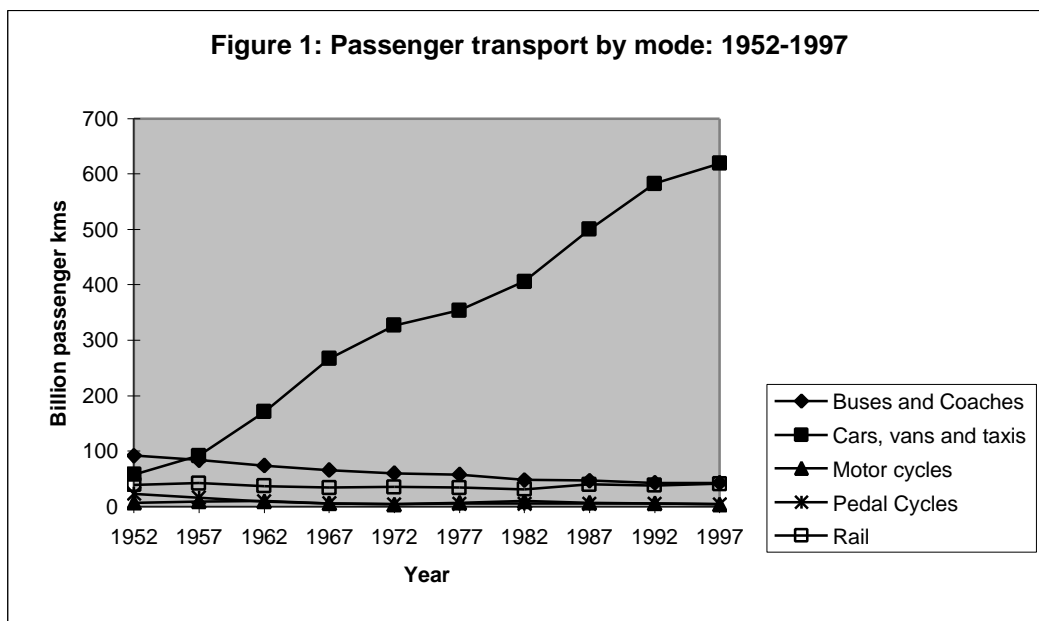
A version of this will be published in *Transport Review* early in 2000

December 1999

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Our country needs road pricing. Like many other nations, Britain is grinding to a halt. Widespread road tolls would be good for firms, for people, and for the environment. The money raised could be spent in useful ways – such as reducing other taxes.



Source: Government Statistical Service (1999). *DETR: Transport Trends 1999 Edition*. London: Stationery Office.

Figure 1 depicts the rise in car traffic from the early 1950s to the late 1990s. In the last twenty years, it has doubled. Britain is a small and heavily populated island. As the graph shows no sign of flattening, something has to be done if our children and grandchildren are not to be overwhelmed by jams and concrete. Those who oppose road pricing should be made to stare at this graph.

The argument is simple. Imagine what would happen if supermarkets gave away their products for free or nearly free. During long periods of the day, there would be enormous queues outside supermarkets. People would have to get up early and allocate periods in their diaries just to be able to buy food. We would have brought old-Russia to Britain.

It would be no use building wider front doors to these supermarkets (the let's-build-more-roads approach), or having special paths into supermarkets that only certain kinds of people could use (the bus-lane approach). As soon as the queue started to shorten, other consumers would notice and come to the new wide-entrance supermarkets. Dealing with the queues would be a manager's nightmare. The supermarkets would be better advised to put prices on their goods. That is what they do, of course, and it works well.

Queues happen when a demand-and-supply mechanism fails. Economists know that using the price system to ration things is the most sensible way. This is what we do for steel ingots, newspapers, cream teas, and everything else. It is especially necessary on roads because drivers do not bear in mind, when they make a journey, that their presence on the road creates an 'externality' for others. Just as fishing boats tend to over-fish because their captains are not thinking of the consequences on other skippers, so we all ignore the congestion cost that our own vehicle imposes on others.

It is not widely realised how much traffic congestion especially distorts the lives of our most highly skilled workers. The data show that commuting time for Britons with university degrees is one and a half times as long as for others. In south-east England, one quarter of all those with university degrees spend more than 2 hours a day travelling to and from work. This is a waste of people's lives, wrecks marriages, and increases road rage and stress-related illnesses. We have grown to accept it is impossible to drive to Heathrow airport at 8.30 in the morning; so we now design our lives around traffic jams. Yet we should not. Road pricing would make our roads run freely again.

There are various misleading objections to road pricing.

The most common claim is that road tolls would raise firms' costs by making them pay extra charges. It would not. Road pricing would make life cheaper for firms in Britain. Tolls would be set at the right level to make traffic flow freely – and no higher. A road toll of £5, say, would be

negligible for a firm's lorry carrying £100,000 of goods. But it would be a lot of money to a person going to the shops for a newspaper or heading off to a leisure centre for squash before work or a parent who does not want their child to take the bus to school because it is raining. The road toll would take such users off the road and out of the lorry's way. A lorry journey time that is cut by 10 minutes would easily be worth the toll. Thus, road pricing would cut companies' costs and make the British economy work more efficiently.

It may be desirable and efficient on environmental grounds, however, to encourage some freight to be sent by rail rather than road. It would be a simple matter for a government to set tolls on lorries at a different level from those on cars.

Why do most road users say they are against congestion charging? One reason is that opinion polls are usually run by organisations trying to get people to say this. Another is because people do not realise, when answering opinion polls, that road tolls would clear the roads. After an experimental week of road tolls, we think Britain would be delighted and never wish to go back to the jams of toll-free roads.

Another major criticism is that road pricing would hurt the poor. It would not. The purpose of road pricing would be to take money from the rich. Those on high salaries would be happy to pay a few pounds to be able to get to their work at 9am without having to rise at the crack of dawn. Sensible road tolls would be designed to be high at peak times. Those earning good wages would travel then and pay for the privilege. Those on low incomes would travel at other times of the day when the tolls were low or even zero.

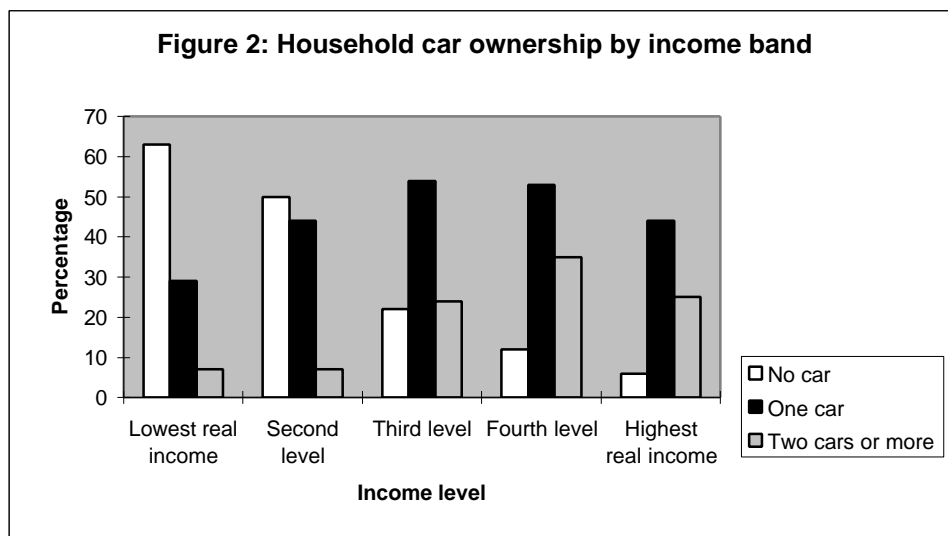


Figure 2 shows that nearly 65% of people in the lowest real income category do not own a car. Thus, they would be unaffected by peak charges.

Road pricing is not a new idea. It dates back to at least as early as the seventeenth century with the introduction of turnpikes and user-based toll fees. During the nineteenth century, there were more than 1,000 privately owned turnpike trusts operating 20,000 miles of toll roads. Revenues from turnpike tolls were used to pay off mortgages for road construction. Any extra money was used for road improvements and street lighting. The last UK turnpike toll was collected in 1895.

Several methods of tackling road congestion are possible:

- 1) Electronic road pricing (ERP) schemes, cordon tolls or toll booths;
- 2) Restricted access at certain times or on certain days to different coloured/numbered cars (e.g. Athens, Mexico City);
- 3) Meter parking in residential areas near Central Business Districts;
- 4) Closing roads to cars at certain busier times (e.g. Oxford);
- 5) Toll bridges (e.g. The two Severn Bridges).

Those schemes that involve directly banning drivers infringe personal freedom and are less desirable than road pricing.

One of the most comprehensive and preferred schemes involves ERP, where variable tariffs more accurately reflect the marginal external costs of a trip. In Spain, France, Italy, Japan and some US states, the toll revenue is used to finance new motorways, and users pay for roads through licence fees, fuel tax and a weight-distance charge for HGVs. Other ERP systems have been installed in Barcelona, Lisbon, Dallas, Oklahoma and Florida. Oslo has had a system in place since 1990 using electronic tags and a cordon of electronic beacons around the central business district which deduct credit from the tags each time you pass through them. Singapore is testing a newer system and Stockholm is beginning a similar scheme for its ring road.

Charging people to use their cars will create extra revenue for the government. Apart from reducing the need for other taxes, there are three main areas in which it could be used:

- Better infrastructure
- A more efficient public transport system
- Environmental measures

All would be valuable.

Singapore has 220 vehicles per km of road - one of the highest densities in the world. To limit growth in car ownership, it has placed high customs duties on imported cars, and set high registration fees and road taxes. In 1975, it was the first city to adopt congestion pricing based on area licensing. People buying a new car also had to buy a permit, with only 40,000 issued per year. There is now restricted car use in the 7km² central zone so drivers have to show a licence and pay a toll of \$2 during the morning peak and \$1.30 off-peak. In 1989, the evening rush-hour surcharge reduced afternoon traffic and increased average speeds in the restricted zone by 20%.

Since March 1998, all cars have a transponder fitted behind the windscreen which holds a pre-paid cash card. This is detected by an overhead gantry and the motorist is charged for his/her contribution to congestion. Tolls have also been debited for those using the East Coast Parkway during the morning rush-hour. The rest of the day is free. The result of this scheme is that 60% of trips to work are made by public transport.

Lim Ee Guan, from the Singaporean Ministry of Communications, argues that Singapore's traffic control policies have reduced congestion, increased traffic speed, and given bus commuters quicker journeys both in the CBD and on expressways. He points out that ERP has increased charges and lowered ownership taxes -- hence controlling congestion without raising the total costs to road users.

Singaporean traffic now moves at an average of 60kph even at peak times. Road tolls in Singapore have been a success. Queues do not build up. People who need to travel somewhere urgently, rather than waiting, pay a premium for the convenience.

Road pricing works. Our country needs it.

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Related reading

www.ft.com Letters and articles in the Financial Times throughout 1999 on the arguments for and against road pricing by, among others, Charles Batchelor, Martin Wolf, Andrew Oswald, David Newbery, Neil Record, Simon Sperryn, Richard Tomkins.

David Begg, "Urban Road Pricing: Time for Action", unpublished paper, Robert Gordon University: Aberdeen, October 1997.

Andrew Benito and Andrew Oswald, "Commuting in Great Britain in the 1990s", unpublished paper, Warwick University, December 1999.

The Economist, "Road Pricing", December 6, 1997.