

Can we get consensus on the need for a
national road user charging scheme?

Transport Planning Society Bursary Paper

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Executive Summary

The objectives of a possible charging scheme are set out in *Managing Our Roads* published by the Department for Transport (DfT) in 2003, as follows:

- To deliver a more efficient approach to the structure of transport pricing;
- To be fair, respect privacy, and promote social inclusion and accessibility;
- To deliver higher economic growth and productivity for all regions of the UK;
- To deliver environmental benefits.

The DfT has commissioned a road user charging feasibility study which is to provide advice covering the possible structure of a scheme, impacts on congestion, accidents, the environment, public and private modes of transport, different groups of people and on different areas urban and rural, the relationship with schemes already in place, legal issues and confidentiality, technology options and interoperability between schemes in the UK and Europe.

Bartley's Demand Management Paradox demonstrates that any proposed national charging scheme would have to satisfy the following key groups before it could be adopted:

- The motorists as the main persons or group affected by the measure (Public Acceptability)
- The politicians as the key decision makers (Political Acceptability)
- The business community and Institutional agents

This essay has therefore considered the acceptability of a national road user charging scheme in principle by various organisations, the general public and politicians and has commented on the most likely scheme to be acceptable to all parties.

From reviewing the recommendations of the multi modal and various other commissioned studies the government must decide between a scheme which is revenue neutral, whereby road users receive a tax deduction elsewhere or one which raises revenue which is used for transport spending.

The various public opinion polls on road user charging identify a general unhappiness with today's levels of congestion. Opinion polls undertaken on behalf of CfIT and the RAC Foundation show the highest percentage support for revenue being used to improve public transport rather than being returned to the road user. The response to road user charging by a cross section of organisations representing the views of different sections of society has resulted in similar findings. In addition the perceived success and support by all parties of the London scheme is likely to give us the greatest indication of the acceptance of a nation wide scheme.

Although the implementation technology which will be used if a national road user charging system is introduced is yet unknown, there is a strong possibility that that the scheme will be an extension of the system that proposed for introduction in 2008 for road haulage industry. The demonstrated need to carefully consider who might implement such a scheme highlighted by Stephen Glaister and the proposals from the Freight Transport Association for a Strategic Network Operator suggest that the Treasury may not be considered the most suitable agency to control road user charging funds.

Considering the responses by various organisations and the general public there is a broad agreement in principle with national road user charging. It is also far more likely that there would be fewer objections to a revenue raising scheme which provides both public transport improvements and would provide some reduction in taxes to the motorist as proposed by the RAC Foundation.

It is therefore up to the political decision makers to take the process forward. At this point in time it is likely that politicians have a perception of low public support for national charging. The media then, has a critical role to play in promoting the advantages of the introduction of a scheme to increase both public and political acceptance. It is also recommended that further opinion polls be undertaken to ascertain the acceptance of a national road user charge by the general public.

Although national road user charging is seen as inevitable by many, the outcomes of the road user charging feasibility study and any future scheme proposed by central government is likely to affect the level of agreement of all the parties considered. The responses to any proposed scheme at that time will have to be considered as well as the technological aspects of such a scheme which have not been covered in this paper.

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1 Introduction

1.1 Background

Currently in the UK when considering mode choice drivers do not consider the true cost of their journey. When making individual trips a motorist will ignore the cost of vehicle acquisition and periodic costs such as insurance and breakdown service membership. A motorist also ignores the congestion costs imposed on other road users. It is believed that Road Pricing on a trip-by-trip basis could bring the driver's perceived cost of motoring in line with its true cost.

It is now been acknowledged that expanding road capacity to try and meet demand is not environmentally acceptable. Public transport improvements e.g. light rail, have experienced some success in attracting car users, but have had a limited effect on reducing congestion. The lack of success of these policies, the costs to the UK economy of delays caused by congestion and EU environmental targets have lead to road pricing only now being seriously considered by the current Labour Government.

The Government has therefore commissioned a comprehensive Road Charging Feasibility Study, which will unfortunately not report before the completion of this paper. The study group, which includes representatives, from the public and private sector is to provide advice to the Secretary of State for Transport on the design and implementation of a new system for charging for road use in the UK.

The objectives of a possible charging scheme are set out in "Managing Our Roads" published by the Department for Transport (DfT) in 2003, as follows:

- To deliver a more efficient approach to the structure of transport pricing;
- To be fair, respect privacy, and promote social inclusion and accessibility;
- To deliver higher economic growth and productivity for all regions of the UK;
- To deliver environmental benefits.

(DfT 2003a)

The outcomes of the charging feasibility study are to provide advice covering the possible structure of the scheme, impacts on congestion, accidents, on the environment, public and private modes of transport, on different groups of people and on different areas urban and rural, the relationship with schemes already in place, legal issues and confidentiality, and technology options and interoperability between schemes in the UK and Europe.

Although this study is seen as a step along the road towards the implementation of a national road user charging scheme it is unlikely that any scheme will be

introduced without the backing of the nation. If and when central government proposes a scheme according to Bartley's Demand Management Paradox any proposed demand management scheme would have to satisfy a number of key groups before it could be adopted:

- The motorists as the main persons or group affected by the measure (Public Acceptability)
- The politicians as the key decision makers (Political Acceptability)
- The business community and Institutional agents

(Schade and Schlag 2000)

The intention of this essay therefore is to consider the acceptability of a national road user charging scheme in principle by various organisations and the general public and to comment on the likely acceptance of the schemes, which have been suggested by various studies to date.

1.2 Scope of Paper

In order to establish whether or not we can get consensus on the need for a national road user charging scheme from the general public, politicians and various organisations this paper will consider the following: The next section describes the rise of congestion charging on central governments agenda and the policy tools which have been put in place to aid implementation. Section 3 introduces the studies on nationwide road user charging completed to date. Sections 4-6 discuss the acceptability of road user charging by: various organisations (section 4), the general public (section 5), and politicians (section 6). Section 7 looks at the acceptance of pricing schemes that have already been introduced or are proposed in the UK. From the results of the previous sections Section 8 will consider what form a nationwide charging scheme might take and how it might be implemented and finally section 9 provides conclusions and recommendations.

2 Current Government Policy

2.1 National Policy

Despite commissioning a Road User Charging Feasibility Study, central government's official standpoint on road user charging, whether it be urban interurban or national, is at present hesitant.

In 1998 the Labour government published its transport White Paper, "A New Deal for Transport: Better for Everyone", this paper promised enabling legislation to Local Authorities to charge road users to reduce congestion in urban areas, as part of a package of Local Transport Plan measures. Such schemes must however be preceded by transport improvements and obtain the support of the local community as well as going to the Secretary of State for approval.

The 1998 Transport White Paper also proposes legislation to enable pilot schemes to be developed on trunk roads and motorways either on a self-standing basis or as part of joint schemes with local authorities. It states that on most of the motorway and trunk road network, road user charging schemes will in general be feasible only with full electronic technology and that further studies are required. The paper commits to working with the European Commission and EU member states to ensure that the design of charging systems in the UK is compatible to that of the rest of Europe.

In the Year 2000, the Ten Year Plan for Transport was published by the DETR. The Government, in the plan, acknowledges that inter urban road user charging is unlikely to be introduced before 2010 and proposes to wait on the findings of the Multi-Modal Studies before making any decisions. The Plan also discusses the longer-term reductions in travel demand as a result of land use planning, an expansion in rail passengers and freight, increasing road capacity, bypasses, junction improvements and priority measures and smarter network management. In addition it assumes that 8 of the largest towns and cities in the UK will introduce urban congestion charging schemes.

In 1999 and 2000 (2001 Scotland) there were two Acts of Parliament passed which paved the way for the introduction of charging schemes. The Greater London Authority Act 1999 gave enabling powers to Transport for London, any London Borough Council or the Common Council to establish and operate schemes for imposing charges in respect of the keeping or use of motor vehicles on roads in its area. The Transport Act 2000 transfers powers to local authorities to introduce road user charging to tackle congestion charging and to provide funding for transport improvements.

In both Acts the introduction of road user charging is not a statutory requirement, it allows Local Authorities to introduce them if they feel such a

scheme suitable as part of the implementation of the Local Transport Plan. The Transport Act 2000 allows charging on trunk roads where necessary to complement a Local Authority scheme but in general it suggests there a number of practical and technical issues to be resolved before widespread trunk road charging could be introduced such as problems caused by diversion from trunk roads to unsuitable local roads, and the effects of charging on socially excluded groups and further research to be done on the electronic charging technology and wide spread charging systems.

“Managing Our Roads,” the latest DfT publication, discussed in the introductory section, states that:

“Building on recent technological developments, a more generalised system of road pricing is now also possible with the potential to restructure motoring taxation so that the costs of driving reflect the user’s choice of when and where to drive.”

(DfT, 2003a)

The benefits of such a national system are highlighted as reducing the cost of journeys in uncongested conditions and reducing the potential for vehicles to divert to more unsuitable routes.

The change in government stance between the 1998 White Paper commitment to demand management and the re-emphasis on road building in the 10 Year Plan demonstrates an undecided government or one who fears being seen as anti-motorist. In addition the 2000 Transport Act provides no real impetus for any local authority to implement a congestion charging scheme. The government has granted powers to Local Authorities to consider implementing charging schemes but only at the approval of the public and the Secretary of State for Transport.

2.2 Summary

As can be seen from the evaluation of national policy, for the most part the government, despite commissioning new road building, recognises that the predict and provide approach of the past, which further increases the demand for road travel, is not a long-term solution to congestion. Demand management measures are seen as the way forward to reducing congestion on the UK’s roads.

3 Road User Charging Studies

3.1 Introduction

As the general principle of road user charging is coming to the fore it is important to now consider how a national scheme might be implemented. As mentioned above it is unlikely that the Road User Charging Feasibility Study Group will have reported to the Secretary of State before completion of this essay. There are therefore no proposals but only best guesses of the form that any national scheme would take. There have been a number of studies commissioned which present a number of scenarios for implementation which will be described in this section.

3.2 Multi Modal Studies

In the 10 Year Plan for Transport the government states that they do not intend to take a decision on the role of charging in reducing congestion on the inter urban road network until the completion of the Multi Modal Studies. Despite this statement "Guidance on the Methodology of Multi Modal Studies" (GOMMMS), 2000, provides no specific guidance on testing road user charging as an option. The Multi Modal Infrastructure Charging: Seminar Summary Pages (DfT, 2003) demonstrate that as a result a range of different variants of road user charging tested. There is therefore no one clear national picture.

There have however been a number of Multi Modal Studies, which have recommended the need for road user charging including the following examples:

The London Orbital Multi-Modal Study (ORBIT) study proposes an area wide road user charge for most roads in the study area. The Final report states that their preferred approach is that central Government promotes a national road user charging regime, with charges set at levels which maximise the net benefits to society as a whole and states that any scheme implemented should be designed in the following way:

- Be considered good overall value for money, taking account of environmental and safety impacts, economic benefits and disbenefits, and the costs of implementation, operation and enforcement;
 - The distribution and equity of its impacts should be acceptable, it should be financially viable, and it should be practical and broadly acceptable to the public; and
 - It should be acceptable in terms of its impacts on social exclusion
- (KBR, 2002)

The ORBIT final report suggests that it is through appropriate use of revenues that it may be possible to make the system acceptable to the public at large and

to ensure that it does not increase social exclusion but actually improves the integration of society by providing benefits (in the form of better public transport, for example) for the socially excluded. This study also sees the benefits in varying charges according to road, vehicle type time of day and level of congestion.

The South and West Yorkshire Multi-Modal Study (SWYMMS) provides a very similar preferred strategy for its study area. In both cases these studies suggest revenue raising schemes would be the most acceptable to the general public if the funds were used to benefit society. The SWYMMS study also endorses a national scheme in the interests of ensuring the competitiveness of the regions.

Annex A provides a summary table of the charging recommendations of each of the multi modal studies taken from Marsden, G (2004) *The Multi Modal Study Transport Investment Plans*.

3.3 Other Studies

Independent Transport Commission (ITC)

Steven Glaister and Dan Graham in their 2003 research report commissioned by the Independent Transport Commission, "Transport Pricing and Investment in England" establish a number of scenarios including the following to be deliberated between for road pricing in the UK:

- Environmental charges (EC) and Congestion charges (CC): to reflect the cost to the environment and the congestion costs road users imposing on one another;
- Environmental charges and Congestion charges with compensating rebate (revenue neutral): As above EC and CC but with a fuel tax rebate so that the total revenue is equal to that of today;
- Zero fuel tax with environmental charges and congestion charges; and
- Zero fuel tax with environmental charges and congestion charges with a revenue neutral mark up.

(ITC 2003)

In his presentation "Pricing the Nation's Roads: the vision and reality" to the ICE conference on 17th November 2003 Stephen Glaister suggested that a revenue neutral scheme would help reduce opposition from the road user lobby but leave no revenue for improvements to public transport or roads. It was also feared that a revenue neutral scheme might actually decrease the cost of road travel in rural areas therefore encouraging travel by car.

Commission for Integrated Transport (CfIT)

As part of the 1998 White Paper proposals the government indicated that it would create a new body, the Commission for Integrated Transport one of its remits being to independently advise the government on the implementation of an integrated transport policy. In their 2002 report, *Paying for Road Use*, the CfIT supports current urban charging policy but predicts that a national scheme would not be possible until after the implementation of the 10 Year Plan. The CfIT commissioned NERA and Oscar Faber to produce a research model demonstrating the potential benefits of a national congestion-charging scheme.

The model predicts an overall reduction in congestion of 44%, a traffic reduction of 5%, and shorter more reliable journeys without an overall increase in the amount that motorists pay because of an associated decrease in fuel duty and vehicle excise duty i.e. a revenue neutral scheme.

“*Paying for Road Use*” cites the benefits of a revenue neutral scheme for the road haulage industry, for rural drivers, and drivers whose annual mileage is low e.g. pensioners. This scheme has however been criticised for encouraging car use and reducing the use of public transport in rural areas where it is already heavily subsidised. Although there will be no additional revenue raised for public transport improvements the report says that as the elderly, disabled and lower income groups are more likely to use public transport, they will benefit from reduced journey times. It also states that it would not be possible to introduce such a scheme until the 10 Year Plan proposals especially with regards to public transport have been delivered.

RAC Foundation

The RAC Foundation “*Motoring Towards 2050*” report describes the implications of both a revenue neutral and revenue raising national road user charging scheme. Revenue neutrality would mean that motorists who now pay too little pay more and those who now pay too much pay less. Options for this scheme would include cutting vehicle excise duty or cutting fuel duty. The report notes that if a revenue neutral scheme were introduced and all revenue was used to cut taxes none would be available for transport expenditure such as making alternative routes, times of travel or modes better or cheaper, expanding the capacity of charged roads, channeling money through the local authority to help lower income car owners or offsetting the effect of charges on public sector workers. The RAC Foundation’s official position is that they would like to see a mix of both schemes with tax cuts for motorists and improved transport spending.

Institute for Public Policy Research (IPPR)

The IPPR in their 2003 paper 'Putting the Breaks on Climate Change' discusses the merits of a revenue raising road user charge. The IPPR commissioned Imperial College to undertake some research, the results of which are shown in Tables 3.1 and 3.2.

Table 3.1: Summary of the impacts that a congestion charge plus a carbon tax could have in England in 2010

	Revenue Neutral Charge	Revenue Raising Charge
% Change in total traffic	+ 6.7%	- 6.7%
% Change in bus patronage	+ 8.6%	+ 11.4%
% Change in carbon	+ 5.0%	- 8.2%

Table 3.2: The average money cost per kilometre for rural versus urban motorists in 2010

	Rural Areas	Large Urban Areas
No Congestion Charge	9.5p	11.7p
Revenue Neutral	6.9p	17.8p
Revenue raising Charge	10.4p	20.4p

(IPPR, 2003)

The results show that a revenue neutral charge would actually lead to increased traffic levels and CO2 emissions and would make the average costs of rural motoring cheaper than at present. The revenue raising scheme would prevent rural traffic growth without dramatically increasing the costs of rural motoring where there are less public transport alternatives.

A revenue raising charge on the other hand would reduce road traffic in England by nearly 7%, reduce CO2 emissions by just over 8% and increase bus patronage by just over 11%.

The IPPR believe that if motorists are to pay for their road use then a significant proportion of the money raised should be used to pay for better roads and public transport improvements. In addition, as the money raised will be an additional £16 billion per year (compared to a total spend on transport in 2002-2003 of 13 billion) to help make a revenue raising charge more acceptable to motorists the IPPR suggest that the Government should abolish Vehicle Excise Duty (which raises £4.5 billion annually).

Taxation Futures Project (Open University and University of West England)

One of the main tasks of this project was to model the impact on UK traffic and emissions of a fiscally neutral replacement of existing motoring taxes by a

distance charging system. Results indicate a win-win situation when a revenue raising scheme is introduced whereby there is a significant reduction in car use and in CO2 emissions. The results in table 3.3 below reflect that of other studies that a revenue raising scheme will have a greater effect on congestion and CO2 levels.

Table 3.3: Taxation Futures Results

Scenario	Road Intensity	CO2
Replace VED by single km/ charge (rev neutral)	-6%	-
Replace FED+ VED by CO2 weighted km charge (rev neutral)	-6%	-
Replace FED+ VED by CO2 weighted km charge (raise £3bn)	-12%	-6%
Replace FED+ VED by CO2 weighted km charge (raise £6bn)	-20%	-9%

3.4 Summary

From reviewing the recommendations of the multi modal and various other commissioned studies, in summary they all conclude that a national road user charging scheme is necessary. It seems when considering a road user charge for the UK the government must decide between a scheme which is revenue neutral, whereby road users receive a tax deduction elsewhere or one which raises revenue which is used for transport spending. A third option proposed by the RAC Foundation and examined in the Taxation Futures project is a combination of both these schemes.

4 Views of Organisations and Authorities

4.1 Introduction

The organisations identified here include a cross section of organisations representing the views of different sections of society, a number of which are represented in the DfT Road User Charging Feasibility Study. The views of the ITC, CfIT, RAC Foundation and IPPR are reported in the previous section. This section aims to consider the nature of the organisation and any standpoint established thus far to determine firstly whether a national road user charging scheme would be accepted and secondly whether a revenue neutral or revenue raising scheme would be most acceptable.

4.2 Views

Road Haulage Association (RHA)

The Road Haulage Association, state that it is their strong belief that the full benefits of charging schemes will only be realised if the revenues are ring-fenced for spending on transport. They also say, though, that this revenue must be additional to existing transport spending and should be available for spending on all modes including road improvements.

Freight Transport Association (FTA)

As repeated later in section 8 the FTA is in support of a revenue raising national road user charge and states the following:

“Road User Charging represents a unique opportunity to break the link between road taxation and general government expenditure. Using charging revenues to accelerate infrastructure delivery, or make possible environmental improvement schemes which would have otherwise been uneconomical.”

(FTA, 2003)

AA

“Fair Payment from Road Users: A Review of the Evidence on Social and Environmental Costs” produced in 1998 concludes that charging road users for environmental and social costs will require a fundamental reappraisal of the whole system of charging road users (and financing roads). Charges they propose include the following: charging for the use of the road, ‘green’ taxes to cover the social and environmental costs and finally a pure tax on transport. In addition current levels of revenue raised for general government expenditure should be maintained.

Way to Go Campaign Members:

(Age Concern, Carplus, Citizens Advice, Council for National Parks, Campaign to Protect Rural England, CTC (national cyclists' organisation), Dial a Ride and Taxicard Users Ltd, Environment Transport Association, Friends of the Earth England and Scotland, Help the Aged, Joint Committee on Mobility of Blind and Partially Sited People, Living Streets, London Cycling Campaign, National Council of Women of Great Britain, National Federation of Bus Users, National Federation of Women's Institutes, Railfutures, Ramblers' Association, Royal National Institute for the Blind, SERA (Socialist Environment and Resources Association), Slower Speeds Initiative, Sustrans, Transform Scotland, Transport 2000, TSSA (Transport Salaried Staff Association), UNISON, and Woodland Trust.)

This campaign is a joint initiative of more than 25 environmental, transport and social justice organisations to influence Government Transport Policy. The campaign believes that pay as you go charging could tackle unfair trends that penalise public transport users. The campaign group believes that for rural areas, it would be important to ensure a major injection of funds for public transport. Charges, though, should also not be set to encourage the growth of in traffic on rural roads. This implies that the Way to Go campaign would agree with a revenue raising scheme.

4.2 Summary

Although there are a limited number of organisations in this assessment, which cannot be considered as representative of the entire country, in general terms the majority of organisations accept congestion charging in principle. Considering the responses by all the groups considered in the last two sections it is far more likely that there would be fewer objections to a revenue raising scheme where revenue is ring fenced but which would also provide some reduction in taxes to the motorist, as has been proposed by the RAC Foundation. These results are perhaps surprising as they imply that the above organisations are most in agreement with paying increased costs.

5 General Public Acceptance

5.1 Introduction

At this stage the scheme design for national charging has not yet been decided upon, it is difficult therefore to conclude whether or not the general public will accept any scheme. This section therefore considers the acceptability of a national scheme judging on recent attitudinal surveys and behaviour models. It will again discuss whether there is agreement in principle to road user charging and which scheme would be most acceptable to the general public out of a revenue neutral or revenue raising scheme.

5.2 Attitudinal Surveys

The executive summary of the 2002, CfIT Report “Public Attitudes to Transport” suggests that the public is prepared to accept radical action to have a better transport system. Over half of those surveyed by MORI on behalf of the CfIT supported the proposal of charging for driving on congested roads at peak times if the revenue generated is returned to transport users through cheaper petrol. Between 54 and 58% of people surveyed were in support if revenue generated were used for lower road tax or public transport. Results are shown in Table 5.1 below. “Public Attitude to Transport” also claims that congestion is a major concern to those surveyed with 54% of car users experiencing congestion in towns and 34% on motorways on a regular basis (at least once a month).

Table 5.1: Support for National Congestion Charging Schemes

Scheme	% Support
Congestion charging at peak times	30%
If all revenues are used to improve public transport	58%
If all revenues raised are returned to the road user through lower road tax	56%
If all revenues raised are returned to the road user through cheaper petrol	54%

Another public acceptability survey was undertaken by NOP on behalf of the RAC Foundation as part of research for their paper “Motoring Towards 2050”. This survey found similar results to that of the MORI survey for the CfIT but with a slight preference for the equivalent reduction in tax discs or fuel duty with 73% and 76% in favour respectively compared with 71% support for road tolls being used to fund a package of better roads, public transport and traffic management.

The recent 2004 RAC Foundation “Report on Motoring” considers the perceptions of car owners towards paying for road use. The RAC Foundation says that:

“Given that the majority of drivers state that they would not object to the levels of motoring taxation if driving were made easier, we proposed various charging systems to drivers. Their reactions showed a clear preference for a fuel based charging system”

(RAC Foundation 2004)

It was suggested though that although this scheme would raise revenue its success at reducing car use and tackling congestion is doubtful, it would also have a negative impact on the UK road haulage industry. These results seem to contradict that of the previous RAC Foundation report “Motoring Towards 2050”.

5.3 Pricing Measures Acceptance (PRIMA)

In its conclusions, the EU project PRIMA suggests a number of points that should be considered by central government in a charging scheme design to help improve the likelihood of public acceptance. Despite this list being prepared with reference to an urban charging scheme, those indicated below are equally relevant to a national road user charging scheme and should be considered during scheme design.

- Acceptance relates to perceived benefits by users – traffic problems must be evident and it must be demonstrated that road use pricing is the best way forward;
- Acceptance relates to the availability of other modes of transport;
- Equity effects are important in terms of acceptability;
- Negotiating abilities of politicians is an important aspect;
- Acceptance relates to the communication efforts initiated at the beginning of the decision making process;
- There is a general level of acceptance with the privatisation trend and with the increased use of IT and electronic payment in other areas;
- Acceptance by a majority cannot be expected at the start. Experience from some studies indicates that acceptance tends to increase after implementation.

(PRIMA, 2000)

To elaborate on the final point, Hoven (1996) suggests that people are opposed to the introduction of a scheme before implementation because they perhaps think there is a chance that it might not go ahead if public resistance is strong enough. After installation they may become more resigned to it. To illustrate this point in Trondheim, the Public Road Administration carried out a number of acceptability surveys. A survey conducted 6 months prior to implementation showed 8% in favour of a cordon scheme. Two months into the scheme 19%

were in favour. The most recent survey gave a result of 32% with a positive reaction and 27% of people indifferent to the scheme.

Schade and Schlag (2000) provide the following additional notes about enhancing marginal cost based pricing acceptability:

- The objectives of the pricing strategy have to meet main public concerns;
- Pricing strategies have to be perceived as very effective solutions;
- Revenues must be hypothecated and alternatives have to be provided;
- Fairness- people must see themselves as being treated no worse than anyone else and the hypothecation of revenues must result in guaranteeing a desired level of mobility for all;
- Public acceptability can only be expected if people have confidence in all aspects of the scheme.

(Schade and Schlag 2000)

5.4 Barriers to Public Acceptance

One element, which may have a significant impact on acceptance, is the fear of a loss of privacy as a result of using GPS technology. There are also questions about who has access to personal data.

The CfIT claims however there are also many perceived benefits of the big brother approach which compensate for the perceived intrusion on privacy e.g. exact vehicle locations can be given in the event of an accident or breakdown. Other suggestions for the use of this equipment include, for the driver in-vehicle navigation and real time best route guidance. It could be possible to pay for public transport and road charges on a common card. For local authorities, the ability to manage the road network, better targeting for public transport and a more effective policy for the same cost. For commercial vehicle and bus managers, the ability to track vehicles and ensure drivers' hours regulations. For the police, tracking stolen vehicles and enforcement of speed limits and parking offences and finally for insurance companies; a closer match of insurance premiums to risk. This final point may be welcomed by many motorists who are at present paying high insurance premiums to compensate for large numbers of uninsured motorists.

Both the CfIT and ITC promote the benefit of a charging regime in the identification of the need for extra road capacity.

5.5 Summary

The various public opinion polls on road user charging identify a general unhappiness with today's levels of congestion. Despite the CfIT promoting a revenue neutral scheme, the opinion poll undertaken by MORI on their behalf shows the highest percentage support for revenue being used to improve public

transport rather than being returned to the road user. The paper by Schade and Schlag advocates fairness- that the hypothecation of revenues must result in guaranteeing a desired level of mobility for all. This would again imply a revenue raising scheme to be the most acceptable to the general public. As suggested earlier it is unexpected that the general public would be most in favour of a scheme which increases the cost to them. Of the options consulted on, an increase in charging with ring fenced funding for public transport appears to gather most support. However, from the results of the opinion polls it is not possible to conclude whether there is public support for road user charging. Public opinion has yet to be tested with the full set of policy options that might be realistically considered.

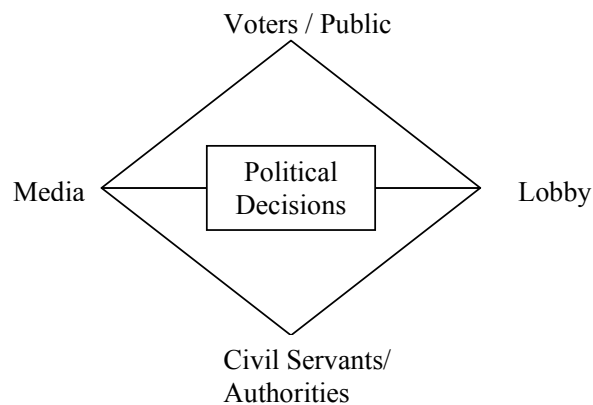
6 Political Acceptability

6.1 Introduction/ Theory

This section will introduce the issue of political acceptability, which also hinges on the acceptance of proposals by the other two sets of people included in Bartley's Demand Management Paradox; the general public and organisations.

Schade and Schlag in their 2000 paper cite EU Project TransPrice which concludes that the lack of political willingness to implement pricing measures stems from a perceived low acceptability by the electorate. Figure 6.1 below is taken from Schade and Schlag (Figure 4.4.1-1)

Figure 6.1 Political Decisions



6.2 Media Portrayal

The portrayal of congestion charging in the media does not reflect the positive attitude towards road user charging described in the above section. There are numerous negative articles to be found about the London Congestion Charge. The Evening Standard in particular has been particularly skeptical of the congestion charge.

6.3 Opposition Parties

The Conservative Party are in strong opposition to road user charging at any level, this is evident in the naming of their transport policy paper "Free to Travel". The party also has a campaign against the London Congestion Charge. The Liberal Democrats on the other hand show support of charging at the local level as do the Green Party whose 2003 budget submission proposes doubling the congestion charge for cars.

6.4 Local Government Association

In an article by Mark Hansford in *New Civil Engineer* 2004, Bristol City Council are said to have cited government indecision as the reason for delaying the development of its city centre congestion charging scheme originally planned for 2006. The article implies that local authorities fear a national scheme could undermine their own plans to impose levies on urban motorists. To address this issue the Local Government Association is to set up a steering group. In a quote given to NCE Lee Searles of the LGA steering group said:

“There could be important implications for local finances, local transport and local planning if there is a national scheme that recoups money to the Treasury”

The implications of a national government charge on congestion charging at the local level should be fully considered before a scheme is proposed.

6.5 Worldwide Political Interest

Whilst a system of electronic road pricing is in operation in Singapore it is from the interest in the London scheme, that politicians are waiting for other countries to make the first move on national charging schemes. The state of Oregon, USA is to introduce a statewide road user charge to replace fuel tax in less than 5 years time and the Dutch Government is also undertaking research.

6.6 Summary

The decisions of politicians are influenced by:

- 1) Groups of people and organisations that are able to lobby politicians, in some cases perhaps more apparent at the local level. Views of lobbyists are not always representative of the entire population. As seen by the discussion in section 4 many of the organisations agree in principle with road user charging at national level.
- 2) The policies of the opposition. The conservatives are in strong opposition to road user charging at any level. The liberal democrats show support of charging at the local level as do the Green Party.
- 3) Their perceptions of the view of the general public. There is therefore a requirement for further testing of public opinion. Politicians are also aware of the influence that the media can have over public opinion. The portrayal of road user charging in the media should therefore be considered of great importance.

7 Current and Proposed Road Pricing Schemes in the UK

7.1 Introduction

At this point in time in the UK there has been one large scale urban congestion charge introduced in Central London one year ago and one inter urban charging scheme, the M6 Toll Road, which was opened ahead of schedule in December 2003. A national lorry road user charge is also scheduled for introduction in 2008. This section will consider these schemes and the degree to which they have been accepted.

7.2 London

Ken Livingstone, the current Mayor of London, using the powers of the GLA Act has imposed a £5 charge for drivers entering or driving within central London between 7.00am and 6.30pm. Cameras send constant signals to an automatic number plate recognition computer system. These images are then matched to a database of drivers registered to pay. There are a number of exemptions including emergency service vehicles, disabled drivers, taxis, and public transport. There is a 90% discount available for local residents.

TfL published “Congestion Charging 6 Months On” in October 2003. The results are shown in the **Table 7.1** below.

Table 7.1: Success of London’s Congestion Charge

	Percentage Change
Congestion within zone	- 30%
Circulating Traffic within zone	- 10-15%
Journey Time	- 14%
Journey Reliability	+ 30%
Inbound Car Journeys Transferred to Public Transport	+ 50-60%

(TfL, 2003)

The original estimations of the scheme to generate a net revenue of £120 million in 2003/2004 and £130 million in subsequent years have been reduced to £68 million for this financial year and £80-£100 million in future years. There has been a fall in retail activity in central London in the first half of 2003 although it appears that this can be related to other economic factors rather than just the charging scheme.

Despite some negative effects, the scheme’s introduction has shown that it is possible to implement a successful congestion reducing scheme using pricing mechanisms. With regard to public acceptability, “Congestion Charging 6 Months On” states that more than 50% of all London residents support the

scheme and 70% consider the scheme to have been effective. There is also a good awareness of the operation of the scheme which is important to its acceptance.

Support for the London scheme by various organisations before and after its introduction varied. The Road Haulage Association and Freight Transport believes that urban congestion charging schemes can be successful in reducing congestion but that imposing a charge on commercial vehicles is unacceptable because commercial vehicles do not travel into city and town centres unless there are essential business reasons for doing so. But the organisations of the Way to Go campaign support the scheme and its successes.

Transport for London claim that 70% of surveyed businesses agreed to continue to support congestion charging as long as there is continued investment in public transport. The London Chamber of Commerce on the other hand found that the charge was having a negative effect on the retail industry within the charging zone especially on smaller retailers.

It is now proposed to extend this scheme, the likelihood of this is high as support by the general public and many organisations has increased as a result of the scheme's success in reducing congestion. In addition to planned extension of the congestion zone, Transport for London is to commission a study for implementing road user charging across the whole of the capital.

7.3 M6 Toll Road

The new M6 toll is a new 27 mile three lane motorway which carries drivers who are willing to pay to avoid the congested M6. The M6 toll web pages quote the CBI as saying that:

“Time savings that are estimated to save businesses billions of pounds a year through reducing wasted man hours, greater fuel efficiency and a renewed commitment to delivery times.” www.M6toll.co.uk/about

The building of the toll road was opposed by a number of agencies including Transport 2000, the CPRE and Friends of the Earth as it cuts through green belt land and damages two sites of special scientific interest. It is also feared it will increase the development pressures on adjacent land.

Despite much local community opposition, this scheme's introduction was less controversial to the general public for two suggested reasons. Firstly, as a result of the London scheme, people have accepted road user charging as the future for our roads. Secondly, because there is no real sacrifice on the part of the public or industry as there is a choice whether to pay or not.

7.4 Lorry Road User Charge

The idea of national road user charging is already being developed in the road haulage industry. The government has committed to the introduction of a UK wide distance based road user charge for lorries as soon as 2008. The charge will apply to all lorry operators regardless of nationality and to all lorries over 3 tonnes. More polluting vehicles will pay more and charges will vary depending on the time of day and congestion levels. There will be a payment system for regular and non-regular road use. In parallel with the introduction of these charges, the government has also made a commitment to reducing duty on fuel for lorries.

The objectives for the charge according to Managing Our Roads (2003) are:

- Fairness and efficiency- all users of UK roads should contribute at a level that reflects the cost they impose in the UK.
- Positive impacts on transport and the environment- the charge should reflect the costs of climate change, local air quality, road maintenance, safety, traffic congestion and noise.

(DfT, 2003)

The RHA's view on road user charging for lorries is as follows:

“The RHA welcomes the fact that the Government has recognised that the current situation within the UK is inequitable and is proposing action to address it and believe that if all our concerns can be addressed satisfactorily, a distance based charging scheme has the potential to level the playing field for haulage in the UK.”

(RHA, 2002)

7.5 Summary

The level of support for each of the schemes varies, as does the aim of each scheme. The London scheme is a revenue raising scheme designed to reduce congestion and to raise money which will be used for a package of transport investments. The M6 toll road benefits its users through decreased journey times it is however a private company who retains the revenue raised. The charging scheme for lorries impacts directly on only the road haulage industry from which there is general support for the scheme as it levels the playing field for haulage in the UK.

The satisfaction with and success of the London scheme is likely to provide the greatest indication of the levels of acceptability and success of a nation wide scheme. Although there is and will always be some potential opposition to the London scheme in there is a general satisfaction with the increased journey time reliability and faster journey times as a result of the charging scheme and with

the investment in the public transport system. The London scheme only affects a small proportion of London residents. Those who are unaffected or who benefit from the scheme without paying the charge may therefore mask true public opinion.

8 Implementation and Administration

8.1 Introduction

This essay does not wish to debate the most suitable technology that might be used as part of a charging scheme but rather consider other implementation barriers such as who might manage the scheme and how, and if a scheme is to be introduced when might it be possible.

8.2 Timescales

Despite the obvious increasing preparedness of the nation for a national charging scheme the RAC Foundation believes that because of several weaknesses in current policy in the UK it would not be possible to introduce widespread charging by the end of this decade:

- It is uncertain how much use Local Authorities will make of their new permissive powers which may depend on success of the London Scheme, and the government lacks levers to promote LA activity;
- There is no policy commitment by Government to introduce charges on motorways or other roads within the responsibility of the Highways Agency; and
- It is unclear whether the split of responsibility between central and local government for roads could deliver a comprehensive charging scheme, particularly while the Government distances itself from the subject.

(RAC Foundation, 2002)

8.3 Pricing the Nations Roads: the Vision and the Reality

Stephen Glaister in his presentation to the ICE “Pricing the Nation’s Roads: the vision and the reality” concludes that the main obstacle to proper road charging is not the acceptability of the principle or finding a suitable technology (which has not been discussed in this paper) but it is finding a trusted, politically accountable system of governance and administration of the funds. It is hoped that the road user charging feasibility study group will consider these obstacles in the designing of a national scheme.

8.4 Freight Transport Association

The Freight Transport Association in their Transport Solutions report has taken the concept of nationwide road user charging a step further and put forward a number of prerequisites to form the basis of a road user charging scheme.

The FTA highlights the key principles of the Lorry Road User charge which should also become the key principles for the charging of all road users. These are:

Trust- a promise from the Treasury that charging is to be introduced to reduce congestion is not a new method of taxation;

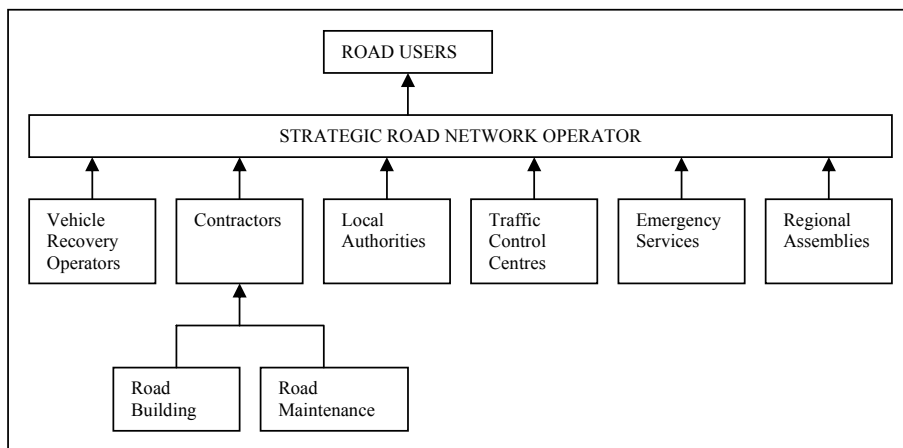
Differentiation- Between travel times and vehicle and road types to give choices to road users; and

Value for Money- To receive value for money the FTA believes that road users must be able to deal with “an accountable entity that is responsible for all aspects: operation, maintenance and development.”

(FTA 2004)

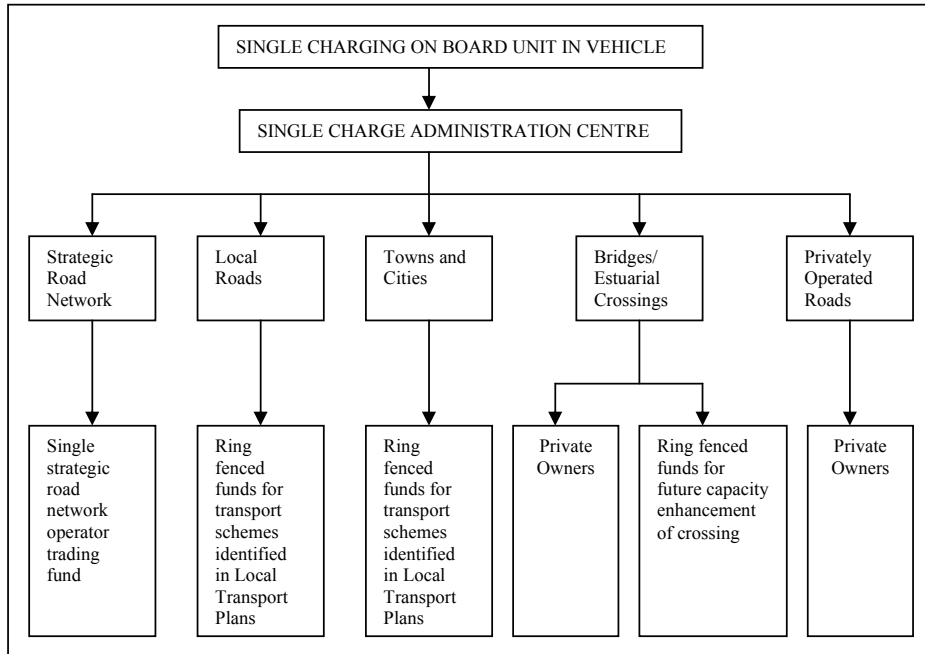
The need for a single, customer-facing ‘entity’ is further expanded by the FTA who envisages an organisation to provide leadership and vision on behalf of the current myriad of agencies responsible for the UK’s road network rather than relying on their cooperation with each other. The role of this strategic operator is indicated in the following figure.

Figure 8.1: How the Strategic Road Network Operator would work (FTA, 2004)



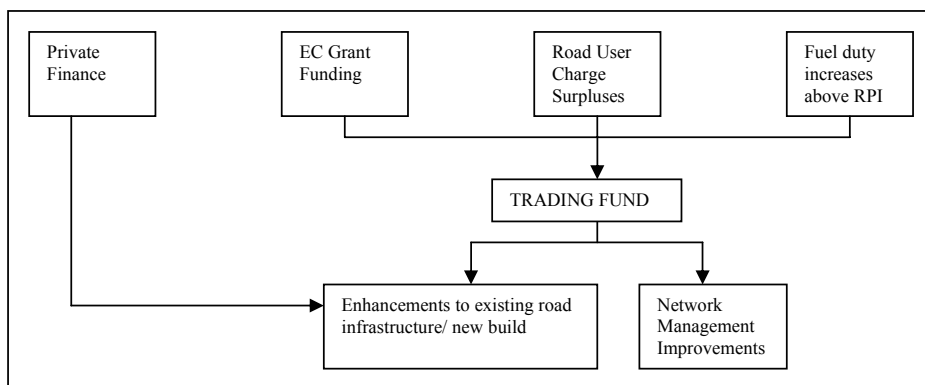
The FTA proposes an integrated payment system as shown in the figure below.

Figure 8.2: Road Charging for All: An Integrated Payment System



In a third figure the FTA emphasises their commitment to a revenue raising national road user charging scheme and proposes that the strategic operator should have its own budgetary authority.

Figure 8.3: How a single Strategic Network Operator Trading Fund would work



8.5 Summary

Although the technology which will be used if a national road user charging system is introduced is yet unknown there is a strong possibility that that the scheme will be an extension of the system that will already be in place for the Road Haulage Industry. The demonstrated need to carefully consider who might implement such a scheme highlighted by Stephen Glaister and the proposals from the Freight Transport Association for a Strategic Network Operator suggest that the Treasury is not considered the most suitable agency to control road user charging funds.

9 Conclusions

The intention of this paper was to judge the likelihood of implementation of a national road user charging scheme through looking at the recommendations of charging studies and its acceptance by the voting public, politicians and various organisations and by the precedent set by those schemes introduced and proposed in the UK to date. It seems that the public and most organisations regardless of individual agenda are in agreement in principle with national road user charging.

From the evaluation undertaken as part of this research paper it seems the most popular scheme for many organisations and the general public would be a revenue-raising scheme which provided funding for improvements to public transport to provide firstly an alternative to the private car, to provide the “carrot” to the “stick” of road user charging to encourage modal shift and secondly, to promote social inclusion by access to key facilities to those people reliant on public transport. The IPPR claim that a revenue raising scheme, could decrease road traffic by 7% and CO2 by 8% and in addition increase bus patronage by 11%.

However, it is felt that a revenue neutral road user charging scheme would receive less opposition than a revenue raising scheme from the road user lobby, it would also result in motorists who pay too little or too much now paying the correct amount.

There are however a number of negatives to a revenue neutral scheme:

- There would be no additional funds for public transport improvements or other transport schemes e.g. increasing capacity;
- Motoring is encouraged in rural areas as it becomes cheaper than at present; and
- The IPPR predict an increase in traffic and CO2 levels resulting from a revenue neutral scheme.

The RAC Foundation’s proposals to reduce taxes whilst providing additional funds for transport spending provides the most appealing scheme to all concerned, whereby motorists pay fairly for the social and environmental costs they impinge on society and funds are directed towards making public transport a viable and more attractive alternative to the private car.

It seems as if there is a consensus on the need for a national road user charging scheme or at the very least a feeling that something must be done about congestion. The decision on revenue raising or revenue neutrality has also been made. The main barrier to implementation therefore is politician’s perception of low public acceptance. The key to increasing political motivation to introduce a scheme is through the media providing greater support for a

national scheme or providing clearer information on why a scheme is required. It is also necessary for public opinion to be assessed further.

Although general acceptance of the principle of road user charging is now high it is likely that the acceptance of the scheme will alter with the publication of proposals and results of the road user charging feasibility study. More controversial than the introduction of the scheme itself could be the suggestions by the Freight Transport Association that the Treasury is not the most suitable agency to control road user charging funds.

If the feasibility study concludes that national road user charging is not the preferred scheme for the future of road transport in the UK, a further question needs to be answered, what is the future for Britain's roads?

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Annex A Road User Charging Recommendations

Road User Charging Recommendations (Source: Marsden 2004)

Study	Urban Charging Schemes	Date	Inter-urban Charging	Date	Comments
A2H	✗	-	✗	-	Not considered due to regeneration obj
CHUMMS	✗	-	✗	-	Examined a £3 urban charge for Camb
SEMMMS	✗	-	✗	-	Tested 10p/km area-wide charge but re
WMAMMS	✓	2005-2015	✓	2020	Urban charging £2.50 in Birmingham, Merry Hill then area-wide charging 1 t
MIDMAN	✓	2011	?	2021	Urban charging in West Midlands, Me (£5), Stoke and Newcastle-Under-Lyme dependent on congestion reappearing -
SWARMMS	✓	2005-2010	✗	-	Bristol City congestion charge support
A1MMS	✗	-	✗	-	Tolling unlikely to meet safety and cap
M1MMS	✓	2010	✗	-	Workplace Parking Levy in Nottingham: peak toll and 3p/km off-peak tested but will
HUMMS	✗	-	✗	-	Lack of suitable alternative routes mad
A453	✓	2011	✗	-	Workplace parking levy in Nottingham
SoCOMMS	✓	2008-2017	✗	-	Urban charging cordon in Southampto workplace/out-of-town retail parking c
SWYMMS	✗	-	✓	2011	4.5p/km area-wide charge all day incre
LOIS	✗	-	?	post 2016	Supported if introduced across UK 6.5
TAMMS	✓	2016	✗	-	£1.40 toll on all river crossings
ORBIT	✗	-	✓	2011	Area-wide charging of 6.5p/km in 201
TVMMS	✗	-	✗	-	6.5p/km area-wide charge provided co
M60JETTS	✓	2011	✓	post 2011	Area-wide charge in Greater Manchest
LSM	✗	-	✓	2016	10p/km after the main infrastructure in
N2P	✗	-	✗	-	Not recommended
WMEMMMS	✗	-	✓	2015-2021	6p/km on strategic roads and 3p/km or controls in urban centres

