HIGHWAY ROBBERY? AN EXAMINATION OF REMAINING GOVERNMENT SERVICES AND SERVICE CHARGES IN THE NEW ZEALAND LAND TRANSPORT SYSTEM

Ross Clark
Economic Department
ANZ Banking Group (NZ) Ltd
Wellington
NEW ZEALAND

ABSTRACT:

While in office the Labour Government has introduced two broad economic policies with implications for the roading sector. The first policy overhauled New Zealand's pervasive indirect tax system with a single broad-based consumption tax, GST. Under such a regime the only justification for retaining consumption taxes additional to GST is to reflect social costs or to charge users. The second policy was the imposition of full-cost charging (user-pays) for government services. This extended the limited cost charging used in the past.

The two economic policies outlined above have not yet been fully applied to the road sector. Thus indirect taxes on fuels and motor vehicles are still in place and Government continues to subsidise the sector by funding and providing services such as safety inspections, safety regulation, traffic enforcement and urban transport. Hence its activities are not "transparent".

This report examines the current pattern of Government expenditure on roading services and recoveries from roading users such as taxes and excises. Significant net gains to Government were made clear. The report identifies the implications for the New Zealand roading sector of a complete application of the policies of no indirect taxes and user pays.

This paper was prepared while the writer was an officer with the Economics Division, New Zealand Ministry of Transport.

A: INTRODUCTION

1 Deregulation and corporatisation have made significant changes to the structure of New Zealand's land transport system. As part of its drive to reduce the role of Government in the sector the Labour Government has introduced two broad economic policies with implications for the roading sector (i.e. land freight and passenger transport and the private motorist). The first policy overhauled the pervasive indirect tax system with a single broad-based consumption tax, GST. Under such a regime the only economic justification for retaining consumption taxes additional to GST is to reflect social costs or user charges. Revenue-raising is to be undertaken in forms which do not distort relative prices (The Treasury, 1987). The second policy was the imposition of full-cost charging (user-pays) for government services. This extended the limited cost charging used in the past.

2 The economic policy framework within which these policies have been established has altered greatly in the last few years. The new framework can be summarised as follows. First, there is substantial reliance on the market for the allocation of resources, leaving other public agencies to attend to social goals. Financial support and taxation are to be as transparent as possible. Second, many Government services are charged out to users at their full economic cost. Many services such as the regulation of aviation safety have been provided up to now on a subsidised basis to people who could well afford to pay for them. Third, an 'equal' consumption tax system has been introduced. An 'equal' system is one in which the relative prices of goods and services are not distorted through sales taxes or excises, and in practical terms resource mis-allocation is minimised. Hence all goods and services should be taxed at the same rate and that the only additional taxes are for the purposes of cost-recovery or for some recognition of the social costs which are generated by the product's consumption. Fourth, targetted assistance is preferred for social welfare assistance purposes to subsidies on various goods and services. Fifth, the aim is that "... [Government's] expenditure should be accounted for in as transparent a manner as possible, [enabling] the true resource costs of different areas of expenditure to be assessed and compared with one another" (Douglas, 1987). The intention is that the costs and benefits of Government activity are better understood. These are thus the policies under which Government activity in the road sector should be managed.

3 However, these policies have not yet been fully applied to the roading sector. Substantial indirect taxes on fuels and motor vehicles are still in place. On the other hand, Government continues to subsidise the transport industry by funding and providing services such as safety, safety

enforcement, and vehicle and vessel inspections. It is difficult to see who gains and who loses.

4 This report examines the implications for the New Zealand roading sector of a complete application of the policies of no indirect taxes and user pays. To examine these implications requires the identification of all services to the sector and all taxes on it. Hence, the remainder of this report is structured as follows. The principles of a neutral tax structure are noted. Present Government activity in the sector is analysed, comparing the net cost to the taxpayer of providing various services with the level of cost recovery through user charges and (implicitly) the excise taxes net of GST affecting roading. These recoveries are then compared with Government expenditure on the sector. This analysis is intended to determine the extent to which the present system is consistent with the principles of tax neutrality, cost-recovery for services rendered, and 'transparency'. The reform of certain financial and administrative structures is also proposed.

B: THE FINANCING OF GOVERNMENT EXPENDITURE

5 There are a number of ways in which the government's expenditure in the sector can be financed. One is 'user-pays'. That is, when Government provides a particular service, its users are identified and charged directly for it. This practice is appropriate when the service provided has a clear end user, and that end user can pay for it. However, many services that Government provides to the land transport and other sectors are either welfare services or public goods (for example, traffic enforcement) and hence are not suitable for user-pays. These goods must be paid for by other taxes. A comprehensive value-added-tax called the Goods and Services Tax (GST) was introduced in October 1986, replacing a plethora of sales and excise taxes.

6 There are two principal exceptions to the standard 10 percent GST. The first exception was with respect to the 'sin taxes' on alcohol and tobacco (in part because of the social costs which their consumption generates). The second exception is the excise on fuel and motor vehicles. This latter deviation from a 'neutral' tax structure needs explanation. As a system of cost-recovery for the services provided to the transport industry it is unclear and nontransparent. It represents a substantial exception to the rule of a neutral tax structure between different goods and services and creates distortions in resource allocation (The Treasury, 1986).

Fuels Excise

7 The Government's major tax on the sector is through the fuels excise. The fuels excise comprises a series of tax rates additional to GST on all fuel forms except CNG and

Table Two

An analysis of government fuel excise revenue for the year ended 31 March (in $m)
Source: Budget 1983-1987

	1983	1984	1985	1986	1987	est. 1988
Refinery Levy (=user cost)					208.0	529.0
Road excise	184.4	224.1	224.8	208.7	236.4	300.0
Jet fuel/avgas					5.3	16.4
Marine					4.7	9.6
Total excise	184.4	224.1	224.8	208.7	454.4	855.0
Highways tax	132.8	138.7	157.6	213.1	208.5	250.0
Total	333.6	375.7	403.4	442.3	673.2	1,105.0

The 1987-88 estimate
The 1987 Budget night estimate of fuel excise revenues was $855 million. The Ministry of Energy estimates for fuel use are given below. Note that data may not add due to rounding.

Fuel Type	**Amount Consumed**	**Tax Rate in c/l (Excise)**	**(Refinery)**
Petrol:			
Premium	2,090 m l	9.8	16.0
Standard	160 m l	9.8	16.0
Auto Diesel:	1,110 m l	7.2	16.0
Jet Fuel	180 m l	7.2	
Avgas	28 m l	11.2	
Marine Diesel	17 m l	5.8	

Notes to Table Two

Fuels Excise: Motor Fuels
The Consolidated Fund receives these monies.

Fuels Excise: Refinery Levy
Until 1 October 1986 the 16c/litre levy used for the repayment of the refinery loans was a separate charge, recovered through the pool account. The Government has annouced its intention to refinance the Marsden Point refinery debt. Hence, after 1 October 1986 the levy was incorporated into that part of the petrol tax which goes into the Consolidated Fund. The levy has been identified separately from the overall fuel tax collected because it is paying for part of the cost of supply of motor fuel. However, it should be noted that Treasury has suggested that the costs of financing the refinery be shifted onto general revenue rather than the fuels excise (The Treasury, 1986). If this policy were adopted, it would remove 16c from the present 25.9 c/litre Consolidated Fund levy. At the moment the extent to which the levy contribution is allocated to the levy itself is being hotly debated, now that the industry has been deregulated.

Fuels Excise: Aviation and Marine Fuels
These values are estimated from Statistics Department figures for total fuel consumed. Until 1 October 1986 they were collected separately from the old 'motor spirits tax'. The basis for the estimates of consumption is discussed in Appendix One.

Highways Tax
The National Roads Board receives the Highways Tax. This is revenue from a charge on motor fuels which is separate to the fuels excise. These funds are spent on the State Highway network and in providing subsidies to local authorities for their own roading work. The Board also receives all road user charges. Road user charges are designed to account for the avoidable cost to the road network of heavy goods vehicles. The former practice was for CNG and LPG to have their contribution costed out separately.

GST and Customs Charges
GST has been ignored in this analysis because it is paid on all goods and services and does not affect relative prices. Hence it is not considered further in this analysis. Customs charges (tariffs and licences) are designed for the purposes of industry protection and not general revenue-raising. Its revenue effects are mentioned in passing. However, they are substantial.

The Energy Resources Levy

10 A further tax on fuel is the Energy Resources Levy. The levy is a charge on the domestic production of coal and natural gas. It is levied at a rate of $2/tonne of mined coal and 45c/GJ for natural gas. It was introduced in 1977 for the encouragement of conservation, but the money goes into the Consolidated Fund rather than being allocated for conservation purposes. The levy is paid by users of those fuels, whether for transport or non-transport purposes. Table Three shows the revenues from the levy since 1983.

Table Three
Energy Resources Levy recoveries since 1983
Source: The Budget, 1983-87.

Year (to 31 March)	Amount (in $m)
1983	40.2
1984	44.2
1985	52.9
1986	72.1
1987	82.7
1988est.	80.0

C: CURRENT GOVERNMENT ROADING SECTOR ACTIVITY

11 The present division of responsibility for road funding and planning makes identifying the financial flows a difficult process. Government funds much of its roading sector activity through the fuels excise, but also through motor vehicles fees and charges and vehicles excise. These revenues are paid to the Consolidated Fund. On the other hand, Government's services to the roading sector are for the most part provided through two separate arms of the Ministry of Transport. The first is the National Roads Board (NRB), which plans and maintains the national roading network. This body is user-funded, and its secretariat is referred to as the Roading Directorate. The second arm is the Ministry of Transport's Road Transport Division (RTD) responsible for licencing, inspection and enforcement in the land transport sector. This division, and the Urban Transport Council which the Ministry also services, are taxpayer-funded rather than user-funded. Figure Three shows the financial flows between the Government and the roading sector. Appendix Two discusses the allocation of funds to the sector in more detail.

Charges on the roading sector

12 A variety of charges on the roading sector exist and they are allocated in a variety of ways. All road revenue except highways tax is paid into the Consolidated Fund. The principal source of revenue is the fuels excise, shown in Table Two above. The Consolidated Fund also receives all fees and charges and motor vehicles excise. These other

items are substantial revenue earners. The rate of excise for motor vehicles is being phased down steadily. Local authority petrol taxation is credited to local authorities for general spending purposes but it can be considered a subsidy to local roading programmes. It is a small levy on total fuel costs (about $18m per year). The Liquid Fuels Trust Board levy was used to fund a research 'quango' which has now been abolished.

National Roads Board

13 The National Roads Board is the Government agency which manages the roading network, and is the only entity whose activities in the sector are paid for directly by users. It is run on a revolving fund basis. All expenditure in any financial year must be paid for out of present revenue or from funds carried over from the previous financial year. The NRB is not allowed to borrow for capital or current expenditure: it was set up on a debt-free basis. Maintenance and capital expenditure on the road network is paid for by a the highways tax (mostly recovered from petrol sales, but also CNG and LPG) and by all roaduser (truck) charges. Until recently Central Government maintained the practice of 'topping up' the NRB's Budget from the Consolidated Fund. Most of the NRB's budget goes on essential maintenance, and only a small amount on 'development' or new infrastructure (the extension of the Wellington motorway counts as development spending). A substantial share of the Board's budget is directed in the form of subsidies to local authorities for their road work. Table Four describes the funding sources for the National Roads Board Budget. Note that the table refers to <u>budgetted</u> expenditure as given in Budget Table 3; actual revenues include various miscellaneous charges and income from investments.

Table Four
Sources of revenue for National Roads Fund Expenditure for year ended 31 March (in $m)
Source: Budget 1983-1987

	1983	1984	1985	1986	1987	est. 1988
Highways tax	132.8	138.7	157.6	213.1	208.5	250.0
RUCs	96.9	96.6	164.1	210.5	210.5	215.0
CNG/LPG	3.2	6.9	12.4	23.8	*	*
ConFund	34.0	93.0	25.0	*	*	*
Total	266.9	326.8	359.1	447.4	419.0	465.0

Government Support to Road Users

15 As well as additional taxes on the roading sector, the Government provides it with three separate forms of taxpayer-funded support. The first is the enforcement and licencing services provided road users by the RTD. Enforcement of the traffic laws comprises two-thirds of the

RTD's budget; in most overseas jurisdictions this work is carried out by the respective police forces. The RTD also supplies inspection services for motor vehicles and driver licencing and testing. Much of this work is subject to cost recovery. The operating expenditure, recoveries and net expenditure to the Consolidated Fund are described in Table Five.

Table Five
Expenditure, Recoveries and Net Expenditure for the RTD for the year ended 31 March ($m)

	Expenditure	Recoveries	Net Expenditure *
1983	49.5	23.1	31.6
1984	49.5	17.7	36.0
1985	51.0	21.0	33.8
1986	59.2	23.8	42.3
1987	71.5	25.1	54.4
1988est.	88.2	32.0	62.9

* Includes capital expenditure

Hospital Charges
16 The second form of support to the road sector is the State-provided hospital and ancillary services to road accident victims. An estimate for the year ended 31 March 1983 of $31 million was made in Brown-Copeland (1987). Scaling up this value for a 55 percent increase in the price level and a 22 percent increase in kilometres travelled derives the numbers shown in Table Six below. Note that these values are quite approximate.

Table Six
Estimates of the Costs to the State from motor vehicle accidents and injuries (based on Brown-Copeland, 1987)

Year ended 31 March	Value
1983	$31 m
1984	$31 m
1985	$40 m
1986	$47 m
1987	$58 m
1988est.	$65 m

The ACC levy
17 Part of the annual relicencing charge is a levy to cover the cost to the ACC of providing compensation to road accident victims. These costs are separate from the costs described above. The magnitude of this levy for the 1986-87 financial year was about $40 million. Although it represents an estimate of the cost to society of road accidents, it is not a cost to the state. Hence it cannot be treated as a

public subsidy to the road sector.

The Urban Transport Council

18 The third form of support to the road user from the taxpayer are the central government-directed subsidies to local government for the support of urban passenger public transport. Peak-time roadusers benefit from the existence of public transport through reduced congestion. The payment of urban transport subsidies is also seen as a way of providing assistance to low-income earners and beneficiaries by subsidising their transport needs. Payments to the UTC over the last five financial years are described in Table Seven below.

Table Seven
Government Support to the UTC
Year ended 31 March

	Amount ($m)
1983	60.8
1984	59.0
1985	54.1
1986	62.1
1987	63.6
1988est.	60.3

Local Transport Funding

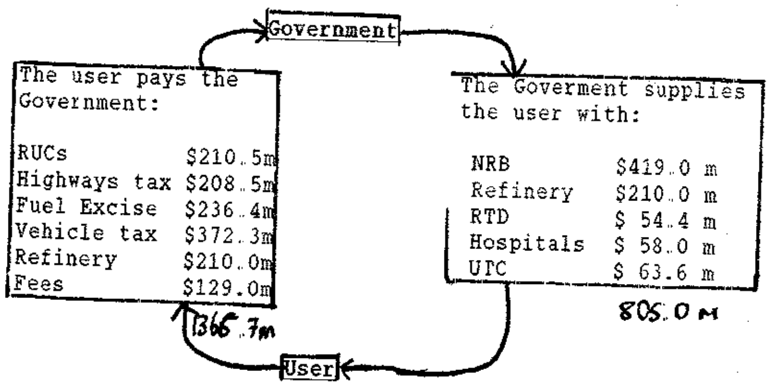
19 This report has concentrated on central government's responsibility towards the road network. However, that responsibility also impinges on the systems used for local roading planning. A few comments at this point are appropriate. The Government supports public transport through the UTC. The National Roads Boards subsidises some local roading activities. Local authorities are then responsible for funding part of their road expenditure from rates. The idea is that local road users and ratepayers can be much more easily identified than national road users and taxpayers. The local authority petrol tax is used for general revenue purposes rather than being dedicated to road funding.

Overall financial flows

20 Appendix Two demonstrates that the Government's net income (that is, revenue minus disbursements) can be estimated at $560 m for the 1986-87 financial year and $459m for the 1987-88 financial year. (Appendix 2, subtable E). The cost to the Government of <u>providing</u> services to the roading sector is more than compensated for by its recoveries from the sector. Over the last five financial years the average value for road spending as a percentage of road taxation has been about fifty percent, a ratio in line with much overseas practice (Barnes, 1987). Motorists are considered fair game for the taxman! For the present

financial year the ratio of road spending to road taxation will be just under sixty percent. The refinery levy has been netted out in order to preserve comparability of data from year to year and because strictly speaking it is a user cost. Figure One illustrates Government revenue and expenditure for the road sector.

Figure One
Government taxation of and support to the roading sector (1986-1987 financial year)



Net: $560m to Government.

21 Some important trends in Government policy can be identified from the data in Appendix Two and illustrated above. First, the motor vehicles excise (Subtable A) is smaller than previously, although this reflects the introduction of GST. The share of road taxation that is actually spent on roads is increasing (Subtable E). Second, the net and gross fuels excise revenues must be kept distinct. The large increase in fuels excise for the 1987-88 financial year reflects a policy decision by government to take over the refinery's funding (Douglas, 1987). The estimate of $529m for the 1987-88 financial year was derived from examining the ratios within the fuels excise. Third, the Government no longer 'tops up' the NRF from the Consolidated Fund. This was the practice before road user charges were substantially increased in 1985. The abandonment of 'topping up' is an issue of annoyance to the road transport industry (Langbein, 1987).

22 Comparing the Government's road sector taxation with its disbursements to roadusers allows a better picture to be had of Government's activity. The over-recovery from the sector is substantial. To put it another way, the petrol tax (i.e. separate from highways tax) would pay for urban transport support, hospital and ancillary charges, and the running costs of the RTD - and still have money left over (Subtable F). There is still the revenue from fees and charges, and the vehicles excise. To re-organise the NRF to account for these disbursements would only comprise a cosmetic change, but it would demonstrate Government's activity in this area much more clearly.

D: POLICY IMPLICATIONS

23 The analysis above demonstrates that there are four substantial discrepancies between the Government's overall economic policy framework (see Introduction) and its practices in the roading sector. First, its financial treatment of roading is neither transparent nor explicit. There are some services for which no obvious corresponding charges are made and there are some charges for which no corresponding service is provided. Services such as hospital care for road accident victims or enforcement are not identified as a service for which users should pay. On the other hand, motor vehicle licencing fees are not related to any explicit service provided. Second, it is inconsistent with the commitment to tax neutrality that substantial excise taxes on fuels and motor vehicles are still in place. While a large part of the excise represents a user charge for the refinery, there is still a substantial surplus for the Consolidated Fund. Even after allowances are made for the Consolidated Fund payments to each mode (for service provision) over-recovery is still evident. Third, many local-level interventions in the sector clash with Government policies with respect to provision of welfare. While transport subsidies do have welfare purposes, the main

beneficiaries from the present system of urban transport funding are income earners and road users. The present system also clashes with the Government's stated intention that the regions 'stand on their own two feet.' Fourth, there are still unresolved issues to do with the refinery levy and the Energy Resources Levy is a continuing anomaly. The policy analysis below examines the problems of the present system and suggests options for reform.

Accountability and Transparency

24 The first problem that this report has identified is that of the lack of transparency in the Government's present arrangements for road transport funding. Identifying all the inflows and outflows is a complicated exercise. The solution for this problem would lie in the introduction of a Revolving Fund structure through which all Government charges <u>from</u> the sector and all supports <u>to</u> it would be channelled. Thus, it would be straightforward to extend the National Roads Fund to account for the Government supports to the industry. It would include all motor fuels excises, fees and charges, vehicle excise taxes, road user charges, and the costs of running the RTD. Appendix Two shows a possible way of displaying this information. For example, if it were decided to charge the roaduser for the hospital costs of road accidents, then a transfer from the NRF could be identified for that purpose. If the Government wanted to transfer part of the fuel tax into <u>general</u> revenue then its transfer, and the reasons for doing so, would have to be made plain. The road user would at last get a sound idea of the Government's policy. The incorporation of the MWD's Roading Directorate (which services the NRB) into the MoT may assist this process.

Cost-Recovery

25 The second problem this report has identified is that the Government's cost-recovery mechanisms for safety services need improvement. Users are often charged less than the full cost of providing a service like inspections, and it is impossible to charge out enforcement directly. On the other hand, the only economic justification for the fuels excise is that it is the most efficient way of recovering sectoral costs (The Treasury, 1987). There are both efficiency and equity arguments for change - especially for those users of fuels in non-transport purposes such as heating. They are being taxed for services they do not receive.

Local Transport Planning

26 The third problem this report has identified in the present arrangements is the conflicting systems used for local level road transport expenditures. This problem has three separate issues. These are first, the organisational structure; second, the structure of the present local authority petrol tax; and third, the role of the UTC.

27 First, responsibility is diffused because of the number of organisations involved and their conflicting responsibilities. There are four separate local units in road planning: regional roads district councils, regional/united councils, territorial local government and the local committees which distribute the proceeds of the local authority petrol tax. Regional roads district councils are mini-NRBs, with similar representation. While there are some specially-designated regional roads, territorial authorities and the District Roads Councils organise local road planning and funding. Urban public transport is the responsibility of the respective regional government.

28 Second, the anomaly of the local authority petrol tax must be resolved. At present a small part of the petrol tax is dedicated to local government for 'general revenue purposes'. This is not consistent with Government's policy of tax neutrality. A local authority petrol tax is more appropriate for funding local public transport or road requirements.

29 Third, the role of the Urban Transport Council must be re-examined. There are three reasons for this. First, it is a clumsy form of providing welfare assistance because the main beneficiaries of UTC spending are income earners in the two main centres. Present Government welfare policy is to 'target' assistance as much as possible. Second, UTC public transport spending comprises a substantial subsidy from the general taxpayer to the roaduser, because public transport helps cut congestion and hence vehicle operating costs to roadusers. Third, it acts as a transfer from the rest of New Zealand to Wellington and Auckland and is thus inconsistent with Government regional policy. The rest of New Zealand should not be paying for the urban transport difficulties that are of Wellington and Auckland's own making.

30 A possible solution to these problems might be to devolve more responsibility for road planning and funding to local units of government. The <u>quid pro quo</u> would be the removal of UTC support. Regions would have to fund road works and public transport from NRB grants, rates or a regional petrol tax. The structure for the latter is already in place through the local authority petrol tax system. It would lead to differing regional petrol prices as regions determined their own roading priorities. It would also mean higher petrol tax rates in those areas which now receive substantial UTC funding, that is, Wellington and Auckland. It is worth noting that the Government has given a clear signal that it will wind down its support to the UTC.

Other levies

31 The fourth issue to resolve is that of the other fuel

levies: the refinery levy (automotive fuels) and the energy resources levy (indigenous fuel stocks). This analysis has assumed that the 16c/litre excise which goes to the refinery's financing is a user charge. However, Treasury have argued that the refinery debt be met through general taxation (The Treasury, 1986) as a prelude to deregulation. If this were done without any other changes, the goverment be leaving $500m in the roading sector that it extracts at present. The immediate effect to the motorist would be that petrol would fall in price by 16c/litre.

32 The question of the energy resources levy must also be resolved because as presently structured it is an anomaly. First, it is used for general revenue purposes and not dedicated either to promoting conservation or to recovering the costs of the Ministry of Energy. This comprises an exception to Government's overall taxation policies. Second, most fuels face inelastic demand with respect to demand but highly elastic demand with respect to income. (Scott et al, 1987). Increasing their price is not a sound way to encourage their conservation. If the reforms suggested in this paper are adopted the price of petrol relative to CNG will fall. This would be a more straightforward way of protecting energy reserves than a discretionary tax.

Customs duties

33 It should not be forgotten that customs duties on the importation of motor vehicles are still a substantial revenue earner for the government. It has not been possible to identify Government's customs revenues from vehicles imports but they have been estimated at $200m for the 1984-85 financial year (Langbein, 1987). This can treated as a further tax on vehicle owners. Recently a substantial decrease in tariffs on vehicles in both assembled and non-assembled form was announced. Protection for the local assembly industry is being wound down.

G: CONCLUSION

34 The Government is committed to consistency, neutrality and transparency in its economic and taxation policies. It is plain that neither its inputs into the transport sector nor its taxation from it are accounted for clearly. The changes proposed here would be a major step in the process of better identifying Government activity in the transport sector. Users do pay for the safety services and infrastructure that the Government provides. However, their payments for those services are not nearly as explicit as they should be. At a local level, there is a diversion from both the government's economic and regional policies because of the heavy subsidies to the Wellington and Auckland regions through the UTC. The revenue lost from removing excess charges on the sector could be recovered from a shift in GST to 15 percent.

Winners and losers

35 There is no economic reason why road users should be overtaxed relative to other goods and services. They more than pay for the costs they impose on the Government. Thus, any shift in fuel and vehicle taxes will have these effects: It will reduce the cost of motoring to the private motorist and the cost of road transport to all users, relative to all other commodities. By reducing relative internal transport costs, it would slightly favour industry in regions as opposed to industry in the metropolitan areas. The changes proposed in this paper would reduce direct running costs to private motorists.

36 Seen in the light of the total cost of motoring, additional Government sector charges do not appear excessive. But the charge of 'highway robbery' is still justified. Roadusers should not have to be taxed extra simply because they are an easy target and demand for the road is price-inelastic.

Latest Developments

37 In December 1987 the Government announced a reduction in the rate of fuel excise that would reduce its revenue from this source by $200m in a full financial year (Douglas, 1988). This change was to have taken effect from 1 April 1988 but was later abandoned. The effect of any decrease would have been as follows. Since the bulk of the excise is met from motor fuels, it would have been equivalent to a reduction in the costs of motoring of about $190m per year. The ratio of road user spending to road user taxation would have been increased to about seventy percent. Even if this change in policy had been adopted, registration fees and the surviving fuels excise would be more than sufficient by themselves to cover the State's services to the road user. Likewise, the vehicles excise is falling only slowly.

38 The Government also announced an increase in the rate of highways tax to 9.9c/litre from 1 April 1988 and a corresponding increase in road user charges. However, no move has been made as yet to integrate NRB and RTD funding.

Acknowledgements

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Appendix One
Estimation of the revenue from marine diesel and jet fuels excise

1 The Government does not record separately the revenues that it obtains from marine diesel and jet fuel excise. However, the rate at which each fuel is taxed is known. The recoveries for each excise can thus be estimated from Statistics Department and internal MoT records of fuel consumption.

Marine Diesel

2 Since 1983 marine diesel has been taxed at a standard 5.8c/litre. Consumption in millions of litres per annum and estimated revenue raised is shown in Table One.

Table One
Marine diesel consumption and estimated excise revenues

Year ended 31.3	Amount (m litres)	Estimated Revenue ($m)
1983	166.8	9.7
1984	175.1	10.6
1985	207.6	12.0
1986	166.8	9.7
1987	165.5	9.6
1988est.	165.6	9.6

Jet Fuel

3 Jet fuel has been taxed at a consistent 7.2 cents per litre since 1982. This tax applies only to fuel used for domestic services. By convention, fuel supplied for international services is not taxed. Table Two shows consumption and estimated revenues.

Table Two
Jet fuel consumption and estimated excise revenues

Year ended 31.3	Amount (m litres)	Estimated Revenue ($m)	
1983	83.7	6.0	
1984	90.7	6.5	
1985	112.8	8.1	
1986	134.2	9.7	
1987	133.2	9.6	
1988est.	180.0	13.0	+ $3.4m for avgas (cf Table 2 in the main report.)

The estimate of fuel consumption for the 1987-1988 financial year was obtained from Treasury. Its data were based on Ministry of Energy forecasts. Aviation fuel and marine diesel excise comprise only three percent of total government fuel excise revenues.

Appendix Two
Government Taxation of and support to the roading sector

1 Appendix Two describes and analyses the government revenue from and support to the roading network (including all the charges on roadusers) and attempts to identify the net surplus to the government from the road network. The material is divided up into subtables. Subtable A shows total government taxation and user-charges. Subtable B illustrates the way in which the National Roads Board is funded. Subtable C shows other Consolidated Fund support for road users, such as traffic enforcement. Subtable D brings together subtables B and C to illustrate total central government spending on the road network. Subtable E shows the allocation of all roading income for the government (excises and levies) between roading and other purposes. Subtable F shows the surplus from motor fuels excise after roading-related costs on the Consolidated Fund have been paid. Subtable G shows the distribution of that parts of the fuels excise paid by road users into roading and other uses. The data in Appendix Two were derived from a number of sources. Most of it is found in Table Three and Table A of the Budget. MoT reports supplied the data on RTD and UTC costs.

Subtable A - What taxes does the Government receive from the roading sector?

	1983	**1984**	**1985**	**1986**	**1987**	**est. 1988**
Fuels Excise	184.4	224.1	224.8	208.7	454.4	855.0
Refinery Levy (=user cost)					-210.0	-539.0
Jet fuel/Marine					- 10.0	-26.0
<u>Subtotal</u> (fuels taxation)	184.4	224.1	224.8	208.7	236.4	300.0
Vehicles tax	341.0	375.5	442.0	298.0	372.3	230.0
Fees/Charges	86.1	97.4	101.9	121.5	129.0	120.0
Subtotal: (all taxation paid to the Consolidated Fund)	611.5	697.0	768.7	628.2	737.7	650.0
Highways tax	132.8	138.7	157.6	213.1	208.5	250.0
RUCs	96.9	96.6	164.1	210.5	210.5	215.0
CNG/LPG	3.2	7.0	12.4	23.8	*	*
Total	844.5	939.3	1,102.9	1,075.6	1,156.7	1,115.0

Notes
1. Fuel excise is separate to the refinery levy and highways tax.
2. The refinery levy used to be collected separately from the Consolidated Fund portion. It is netted out to preserve comparability of data.
3. Avgas and Marine diesel tax are now collected within the fuels excise. They used to be collected as a sales tax.
4. Highways tax now includes CNG, LPG and diesel.
5. Vehicles excise is charged on new cars. This does not include Customs dues.
6. Road user Charges are paid by trucks >3500 kg in weight on their kilometres travelled. It is designed to recover the avoidable cost to the road network of heavy trucks.
7. Fees and charges are incurred at relicencing and do not include the portion paid separately to the ACC.

Subtable B - How is the National Roads Board funded?
Source: Budget 1983-1987
(all values in $m)

	1983	1984	1985	1986	1987	est. 1988
Highways tax	132.8	133.7	157.6	213.1	208.5	250.0
RUCs	96.9	96.6	164.1	210.5	210.5	215.0
CNG/LPG Tax	3.2	7.0	12.4	23.8	*	*
Total	233.1	237.3	334.1	423.6	419.0	465.0

Note
The values given for budgetted NRB spending do not include a Consolidated Fund 'top-up' or miscellaneous income. Funds can now be carried over from year to year.

Subtable C
What other support is given to the road sector from the Consolidated Fund? (in $m)
Source: Budget 1983-1987

	1983	1984	1985	1986	1987	est. 1988
Net RTD cost	31.6	36.0	33.8	42.3	54.4	52.9
NRB support	34.0	93.0	25.0	0.0	0.0	0.0
UTC support	60.8	59.0	54.1	62.1	63.6	60.3
Hospitals & Ancillary	31.0	31.4	40.0	47.5	58.0	65.0
Total	157.4	219.3	152.8	151.9	176.1	178.2

Notes

1. The net RTD cost includes capital charges.
2. NRF support from the Confund has now been abandoned.
3. All UTC spending has been treated as road user support.
4. The basis for estimating hospitals and ancillary costs is discussed in the text, para. 20.

Subtable D
What is total central government spending on the roading sector? (in $m)
Source: Budget 1983-1987

	1983	1984	1985	1986	1987	est. 1988
NRB	233.1	237.3	334.1	447.4	419.0	465.0
Confund	157.4	219.3	152.8	151.9	176.1	178.2
Total	390.4	461.6	487.0	599.3	595.1	643.2

Note
These values do not include local government (rate-funded) expenditures, which are about another $150m. p.a.

Subtable E
How is the tax 'take' from the road sector allocated between road uses and other uses? (in $m)
(Source: Budget 1983-1987)

	1983	1984	1985	1986	1987	est. 1988
Road uses	390.4	461.6	487.0	599.3	595.1	643.2
Other uses	454.1	477.7	615.9	476.2	559.6	471.7
Total	844.5	949.3	1,092.9	1,075.5	1,154.7	1,115.0

Total road spending as a percentage of total road taxation:
Source: Budget 1983-1987

1983	1984	1985	1986	1987	est. 1988
46.2	49.1	44.2	55.7	51.5	57.7

Note
Total road spending includes the road network and support for the sector such as enforcement, hospital costs, etc. The refinery levy has been netted out to preserve comparability of data from year to year.

Subtable F
What is the surplus from motor fuels excise left in the Confund after all road-related charges have been paid?
Source: Budget 1983-1987 (in$m)

1983	1984	1985	1986	1987	est. 1988
27.0	4.8	71.9	56.8	58.4	121.8

The movements in the ratios over the last few years reflect the introduction of GST and policy changes with respect to tax allocation. The Government could fund all its road expenditures which are not already paid for through user charges from the fuel excise on motor fuels and still have money left over. Vehicles excise and fees and charges would not be necessary.

Subtable G
A comparison of the revenue earned from highways tax and the revenue earned from fuels excise on motor spirits (in $m)
Source: Budget 1983-1987

	1983	1984	1985	1986	1987	est. 1988
Highways tax	132.8	133.7	157.6	189.2	208.5	250.0
Fuels Excise	184.4	224.0	224.7	208.7	236.4	300.0
Total	317.2	362.8	382.4	421.7	444.9	550.0
Percentage of all motor fuels taxes allocated to the NRF:	41.9	38.2	41.2	50.5	47.1	45.5

Extending the NRF to have all charges and revenues handled through it would identify the over-taxation from the road sector. The value for fuels excise is net of the estimated refinery levy.