

NATIONAL ECONOMIC AND SOCIAL COUNCIL

Transport Policy

No. 48

NATIONAL ECONOMIC AND SOCIAL COUNCIL

Transport Policy

NATIONAL ECONOMIC AND SOCIAL COUNCIL CONSTITUTION AND TERMS OF REFERENCE

1. The main task of the National Economic and Social Council shall be to provide a forum for discussion of the principles relating to the efficient development of the national economy and the achievement of social justice, and to advise the Government, through the Minister for Economic Planning and Development, on their application. The Council shall have regard, *inter alia*, to:
 - (i) the realisation of the highest possible levels of employment at adequate reward,
 - (ii) the attainment of the highest sustainable rate of economic growth,
 - (iii) the fair and equitable distribution of the income and wealth of the nation,
 - (iv) reasonable price stability and long-term equilibrium in the balance of payments,
 - (v) the balanced development of all regions in the country, and
 - (vi) the social implications of economic growth, including the need to protect the environment.
2. The Council may consider such matters either on its own initiative or at the request of the Government.
3. Members of the Government shall be entitled to attend the Council's meetings. The Council may at any time present its views to the Government, on matters within its terms of reference. Any reports which the Council may produce shall be submitted to the Government and, together with any comments which the Government may then make thereon, shall be laid before each House of the Oireachtas and published.
4. The membership of the Council shall comprise a Chairman appointed by the Government in consultation with the interests represented on the Council,
Ten persons nominated by agricultural organisations,
Ten persons nominated by the Confederation of Irish Industry and the Irish Employers' Confederation,
Ten persons nominated by the Irish Congress of Trade Unions,
Ten other persons appointed by the Government, and
Seven persons representing Government Departments comprising one representative each from the Departments of Economic Planning and Development, Finance, Agriculture, Industry, Commerce and Energy, Labour, and Environment and one person representing the Departments of Health and Social Welfare.
Any other Government Department shall have the right of audience at Council meetings if warranted by the Council's agenda, subject to the right of the Chairman to regulate the numbers attending.
5. The term of office of members shall be for three years renewable. Casual vacancies shall be filled by the Government or by the nominating body as appropriate. Members filling casual vacancies may hold office until the expiry of the other members' current term of office and their membership shall then be renewable on the same basis as that of other members.
6. The Council shall have its own Secretariat, subject to the approval of the Minister for Economic Planning and Development in regard to numbers, remuneration and conditions of service.
7. The Council shall regulate its own procedure.

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and Mr. D. J. Parish

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COMMENTS

by P. Murphy (IEC)

PART I

THE COUNCIL'S COMMENTS ON TRANSPORT POLICY

Introduction*

1. At its meeting on 16 February 1978, the Council decided to initiate a project on the principles which should underlie transport policy in Ireland. In June 1978, the Council commissioned Professor Christopher D. Foster, visiting Professor at the London School of Economics and Political Science and Director, Coopers & Lybrand Associates Limited, London to examine these principles. The terms of reference for the study were as follows:—

To identify the principles which should underlie a national (inland) transport policy in Ireland, having examined the relevant studies which have been made on various aspects of transport policy and transport activities in Ireland.

The first draft from the consultants was received in January 1979, and the final draft was received in May 1979. The study by Professor Foster and his associates is set out in full in Part II of this document. A summary is contained in Chapter 11.

2. After the Council had embarked on this study the Minister for Tourism and Transport (on 19 September 1978) announced the establishment of a Transport Consultative Commission. The terms of reference of the Commission are as follows:—

To investigate and report on the measures necessary to achieve the most efficient and economic transport system for goods and passengers having regard to the need to maintain a flexible competitive transport system—thereby ensuring the facilities necessary for industrial development through the country as a whole.

*These Comments were approved by Council at its meeting on 20 September 1979.

In accordance with guidelines set by the Minister for Tourism and Transport, the Commission is giving priority consideration to the arrangements for the provision of urban passenger transport services, with particular reference to the Dublin area.

3. The Council is publishing the report of Professor Foster and his associates as a contribution to the debate on transport policy. The report of the consultants raises some critical questions which a coherent transport policy should aim to resolve. Those questions which the Council considers to be of strategic importance are set out in the following paragraphs.

Organisation of Transport

4. One over-riding issue is the need for effective co-ordination on transport matters between the Departments of Environment, Tourism and Transport, the local authorities, CIE and the Gardai—all of which have important functions relating to transport. There is a related question: whether there is need for one Government Department with general responsibility for all aspects of transport policy, including roads and rail network. The need for co-ordination is perhaps most evident in the Dublin area. For instance, five local authorities in the Greater Dublin area, between which there is a lack of co-ordination, are responsible for roads; CIE operates public transport and has responsibility for the rail network. However, the local authorities and CIE report to different Departments of State. An important related issue is whether a Transport Authority, with wide-ranging responsibilities for transport in the Dublin area should be established.

The Railways

5. The key question, having regard to the size of the deficit on rail operations, is whether the (net) public benefits which are provided by the railways are sufficiently significant to justify retaining the railways in whole or in part; and whether these benefits can in fact be provided best by the railways. (The term "public benefits" is used in a wide sense to cover all benefits which are not reflected in the price which is paid for rail transport).

6. If on balance the public benefits can best be provided by the railways, the next question to be answered is whether the benefits justify the level of subsidy currently required to maintain the railways. If the current subsidy is justified, then the issue arises of the way in which a subsidy of this nature can be subject to a periodic efficiency test. A related question is whether the existing arrangements with regard to the setting of financial objectives, pricing policy, and investment policy of CIE, are satisfactory.

Inter-urban and Rural Bus Services

7. The first question is whether, and to what extent, it is justifiable to run at a loss, taking account of the public benefits which arise from these services. Second, should subsidies to loss-making bus operations be provided through cross-subsidisation from profitable bus services, or should the decision to subsidise them rest directly with the Government? Third, should alternative methods of running the loss-making services be considered? Fourth, are alternative financing arrangements possible? For example, could the financing of the deficits be met from local revenues (without implying central Exchequer support at one remove)? Fifth, as in the case of the railways, the question of a regular efficiency test arises with regard to subsidisation. Finally, should alternative methods of meeting public transport needs in rural areas, other than current public transport provision, be considered?

Road Haulage

8. Here the question arises as to whether there is justification for the continuation of quantitative restrictions on road haulage through the licensing and leasing regulations. Another issue that needs to be considered relates to the degree and nature of controls on quality standards and working conditions in road haulage. Should they be stricter than those currently in operation?

Urban Transport

9 The principal policy issues which arise are:

- (i) Investment in road and rail facilities.

- (ii) The bringing of prices charged for the different forms of transport closer to the costs incurred by society—whether through direct charges for road use, or higher charges for parking.
- (iii) Physical regulations of traffic and of parking, together with other forms of traffic management (e.g. busways, bus and taxi lanes, and bus priority schemes).
- (iv) Subsidies for public transport.

Conclusions

10. The Council feels that the transport problem in Ireland is no longer one of information, so much as of decisive action. The time is now overdue for public policy to be determined in respect of the questions which the Council has listed above. Action might be facilitated if responsibility for transport in general were centred in a single Department of State. In relation to Dublin transport, pending a decision on whether or not a Transport Authority should be established, a desirable first step would be the establishment of a co-ordinating committee to direct the implementation of transport improvements and to supervise planning, such as was recommended eight years ago by the Dublin Transportation Study.

PART II

TRANSPORT POLICY

by

Professor C. D. FOSTER
Mr. T. J. POWELL
and
Mr. D. J. PARISH

CHAPTER 1

INTRODUCTION

1.1 The National Economic and Social Council asked us to consider the legislation and policies within which inland transport operates, and to say what were the principles in our view that should underlie a national transport policy, after we had examined the relevant studies made on various aspects of transport policy and transport activities in Ireland.

1.2 It was no surprise to us to find that the pace of change in Irish transport was becoming more rapid. The highest rate of *per capita* income growth in the EEC, industrialisation and the consequences of entering the EEC are bringing about major changes to both the demand for and the supply of transport services. The Irish Government has responded in the 1978 Transport Act and in a number of other ways, among them setting up a new Commission to look at transport as a whole. The next few years may prove of crucial importance in the development of transport policy. There is a demonstrable need to modify current policy to meet changing circumstances. Our recommendations to that end are set out in this report.

1.3 In the time available for our study we have, of necessity, been selective in our analysis and focused attention on what we consider to be the principal problems. The present structure of inland transport in Ireland forms an essential background to our study. Chapter 2, therefore, discusses briefly the position of transport in the Irish economy, and the role played by the various transport modes, whilst Chapter 3 sets out some basic facts about the way in which transport responsibilities are divided between the Departments of national Government, semi-State organisations and the local authorities. We

then examine various aspects of transport in Chapters 4 to 9. The railway is discussed in Chapter 4, inter-urban and rural buses in Chapter 5, roads in Chapter 6, road haulage in Chapter 7, aviation in Chapter 8 and urban transport in Chapter 9. In each of these chapters we identify policy options and recommend possible courses of action. The recommendations are drawn together in Chapter 10, and a summary presented in Chapter 11. The report was completed in early May 1979.

1.4 We have been helped immeasurably by discussions with a number of organisations and individuals. They include:—

- The Department of Tourism and Transport
- The Department of the Environment
- The Department of Economic Planning and Development
- The Department of Finance
- The Confederation of Irish Industry
- The Irish Congress of Trade Unions
- Córas Iompair Éireann (CIE)
- An Foras Forbartha
- Representatives of the road haulage industry
- The Private Association of Motor Bus Operators
- The local authorities in Dublin, Cork, Galway and County Mayo

We have also received valuable advice and comments from the Economic Policy Committee of NESC itself, and we are deeply indebted to its Secretary, John Blackwell for his help at all stages.

CHAPTER 2

TRANSPORT IN THE IRISH ECONOMY

Resources Consumed in the Transport Sector

2.1 The transport sector in Ireland absorbs a large volume of resources. They are provided by both the public and private sector. It is also a significant source of tax revenue.

Investment

2.2 Table 1 shows the investment by the public sector in the improvement of the road system and in the activities of Córas Iompair Éireann (CIE), the main State public transport operator. Figures for the past six years are given, together with estimates of gross national product (GNP) over the same period.

2.3 Although there are variations from year to year, annual investment in roads is accounting for about 0.5% of GNP and annual investment in CIE for about 0.3%. Moreover, the two items discussed above are only part of the total investment in transport. Private households purchase cars and motor cycles, whilst licensed hauliers, own account freight operators and bus and coach operators buy vehicles. McIlraith (1) has suggested that private capital investment in vehicles amounted to £350 million a year in 1977, or about 6.5% of GNP. In total, annual investment in transport is therefore probably in excess of 7% of GNP.

Running Costs

2.4 The operating costs of transport activities are even greater. Over the same six-year period, expenditure on the upkeep of the road system and the costs of CIE operations were as shown in Table 2. The costs of maintaining the road system amount to about 0.8% of GNP, whilst the running costs of CIE are about 2.2% of GNP.

TABLE 1

Public Sector Investment in Transport 1973-1978

	Year ending 31st March 1974	Nine months ending 31st December 1974	Year ending 31st December 1975	1976	1977	1978 (estimate)
Investment in Road	12.5	18.6	18.2	14.0	21.3	26.5
Investment in CIE	7.2	9.4	10.2	15.5	10.7	—
GNP (£ million)	2,743	2,992	3,685	4,489	5,400	—
Road Investment as % of GNP	0.5	0.6	0.5	0.3	0.4	—
CIE Investment as % of GNP	0.3	0.3	0.3	0.3	0.2	—

Notes: CIE figures cover all CIE services, including non-transport investment in such items as hotels, rest rooms and restaurant cars. Provisions for renewal of rail lines and works, which are charged to the Railway Working Account, are also included.
Road figures include public lighting, but exclude overheads and administration.
Figures for the nine months ended 31st December 1974 are put on an annual basis by multiplying by a factor of $\frac{12}{9}$.

Sources: CIE Accounts; Department of the Environment.

TABLE 2

Transport Operating Costs Incurred by the Public Sector 1973-1978

	Year ending 31st March 1974	Nine months ending 31st December 1974	Year ending 31st December 1975	1976	1977	1978 (estimate)
Expenditure on Upkeep of Roads (£ million)	19.5	25.9	28.2	39.0	46.1	50.4
Operating Costs of CIE (£ million)	56.6	66.0	83.0	97.3	105.8	—
Road Upkeep Expenditure as % of GNP	0.7	0.9	0.8	0.8	0.9	—
CIE Operating Costs as % of GNP	2.1	2.2	2.3	2.2	2.0	—

Notes: CIE figures exclude depreciation, interest and provisions for renewal of rail lines and works. All CIE services are covered, including non-transport expenditure on such items as hotels, rest rooms and restaurant cars.
Road figures include public lighting, but exclude overheads and administration.
Figures for the nine months ended 31st December 1974 are put on an annual basis by multiplying by a factor of $\frac{12}{9}$.

Sources: CIE Accounts; Department of the Environment.

2.5 In addition, McIlraith estimated (1) that the private sector spent at least £500 million in 1977 on the maintenance and operation of vehicles. However, such expenditure includes a large tax component. In 1977 excise duty and VAT on petrol and diesel fuel yielded some £146 million, excise duty on motor vehicles, including parts, accessories, tyres and tubes amounted to £32 million, whilst revenue from road tax, driving licences and driving tests was £33 million. In addition, VAT is payable on items such as vehicle repair bills. It follows that expenditure on the maintenance and operation of vehicles net of tax amounted to somewhat less than £300 million in 1977, or about 6.0% of GNP.

2.6 In total we estimate that current and capital resources consumed by the transport sector amounted to some 16% of GNP for 1977. Moreover, there are indirect costs associated with the use of transport, and particularly the use of the road system, such as policing, the treatment of accidents and general administration. We discuss the size of these in Chapter 6, and clearly their inclusion would increase the proportion of GNP consumed by transport still further. It is apparent that transport is one of the most important components of the whole Irish economy.

TABLE 3
Relative Importance of Different Forms of Transport Expenditure by Urban Households in 1976

	%
Purchase of vehicles net of trade-in	25
Motor tax and insurance	12
Petrol	31
All other vehicle expenses	12
Bus fares	12
Train fares	2
Other travelling costs	5

Source: Household Budget Survey: Annual Urban Inquiry: Results for 1976.

Private Expenditure on Passenger Transport

2.7 The annual Household Budget Survey for 1976 showed that 11.1% of total expenditure was directly accounted for by transport. This survey was restricted to urban households, but comparison with the 1973 survey, which also covered rural households, would suggest that the overall national figure is about the same. Table 3 shows the relative importance of different forms of transport expenditure as given by the 1976 survey. Similar information for both rural and urban areas in 1973 is shown in Table 4.

TABLE 4
Relative Importance of Expenditure on Different Forms of Transport in 1973

	Urban Households %	Rural Households %	All Households %
Purchase of vehicles net of trade-in	35	32	34
Motor tax and insurance	12	12	12
Petrol	23	32	27
All other vehicle expenses	13	15	14
Bus fares	12	3	8
Train fares	2	1	2
Other travelling costs	4	4	4

Source: Household Budget Survey 1973: Volume 1—Summary Results.

This shows that the pattern of expenditure did not differ radically between urban and rural areas, although, as might be expected, rural households spend more on petrol and less on public transport. Private transport is of overwhelmingly greater importance than public transport, amounting for almost ten times as much household expenditure. Within the public transport sector, the bus accounts for about four times as much expenditure as the train.

2.8 The relative share of public transport in total transport expenditure does not seem to have altered over the period 1973 to 1976. However, comparisons with the 1965/66 survey show a decline in the importance of public transport between then and 1973. In the

1965/66 survey, which was also restricted to urban households, bus fares accounted for 16% of household expenditure on transport and train fares for 2%.

2.9 The decline in the relative importance of public transport is confirmed by statistics on train and bus utilisation, and on vehicle ownership. Tables 5 and 6 show the passenger usage of rail and bus services over the period 1968-1978. Public transport use presents an uneven picture. Passenger mileage has risen sharply on the railway, but fallen on the urban bus services. The most rapid growth in demand has been on the long distance buses, though part of the growth here is explained by the introduction and development of the school bus service. Developments over the last decade in private transport are shown in Table 7. The number of vehicles licensed rose by over 70% and the fuel consumed by motor vehicles increased even more. The majority of this increase was due to increased purchase and use of private cars.

TABLE 5

Passenger Miles Travelled on the Railway 1968-1978

Year ended 31st March	(000's)	Index
1968	439,449	100
1969	459,213	104
1970	455,873	106
1971	468,900	107
1972	486,385	111
1973	524,454	119
1974	543,755	124
Nine months ended 31st December		
1974	431,493	131*
Year ended 31st December		
1975	558,496	127
1976	489,513	111
1977	542,289	123
1978	600,279	137

Note: *Annualised.
Source: CIE Accounts.

TABLE 6

Passenger Journeys made on CIE Buses 1968-1978

Long Distance Scheduled Services (Includes School Buses)	Index	Number (000's)	Year ending 31st March	Nine months ending 31st December					Year ending 31st December	Notes: *Seriously affected by strikes. †Annualised.
				1974	1973	1972	1971	1970		
Dublin City Scheduled Services	Index	Number (000's)	1968	232,631	227,473	219,952	208,568	200,288	215,259	
			1969	219,675	209,684	200,288	208,568	219,952	212,419	
			1970	219,675	209,684	200,288	208,568	219,952	206,139	
			1971	219,675	209,684	200,288	208,568	219,952	199,866	
			1972	219,675	209,684	200,288	208,568	219,952	215,259	
			1973	219,675	209,684	200,288	208,568	219,952	212,419	
			1974	219,675	209,684	200,288	208,568	219,952	215,259	
Other City Scheduled Services	Index	Number (000's)	1968	39,278	39,663	39,843	37,025	37,301	38,395	
			1969	38,279	38,334	37,025	37,301	37,301	38,395	
			1970	38,279	38,334	37,025	37,301	37,301	38,395	
			1971	38,279	38,334	37,025	37,301	37,301	38,395	
			1972	38,279	38,334	37,025	37,301	37,301	38,395	
			1973	38,279	38,334	37,025	37,301	37,301	38,395	
			1974	38,279	38,334	37,025	37,301	37,301	38,395	
Scheduled Services (Includes School Buses)	Index	Number (000's)	1968	29,873	33,851	36,326	38,888	41,410	50,160	
			1969	29,873	33,851	36,326	38,888	41,410	50,160	
			1970	29,873	33,851	36,326	38,888	41,410	50,160	
			1971	29,873	33,851	36,326	38,888	41,410	50,160	
			1972	29,873	33,851	36,326	38,888	41,410	50,160	
			1973	29,873	33,851	36,326	38,888	41,410	50,160	
			1974	29,873	33,851	36,326	38,888	41,410	50,160	

TABLE 7

Vehicles Licensed and Fuel Consumed in Road Vehicles 1967-1978

	Vehicles Licensed		Fuel Consumed	
	Number (000's)	Index	Number (Millions of gallons)	Index
1967	476	100	180	100
1968	500	105	198	110
1969	516	108	217	121
1970	558	117	236	131
1971	573	120	251	139
1972	599	126	270	150
1973	646	136	286	159
1974	662	139	291	162
1975	681	143	293	163
1976	725	152	—	—
1977	748	157	—	—
1978	815	171	—	—

Sources: An Foras Forbartha, *Road Accident Facts 1977*; Department of the Environment.

2.10 Taken together, these statistics give a reasonably comprehensive overview of passenger transport in Ireland. The private car is the dominant mode of travel and the mode of travel whose use is growing. While long distance scheduled bus services and, to a lesser extent, the railways have experienced some growth in demand, there has been a fall in the use made of the city bus services. Taking all forms of public transport together, demand has been almost stationary.

Freight Transport

2.11 It is extremely difficult to obtain a coherent picture of the current pattern of freight transport activity. There has been no comprehensive survey of road freight since 1964. An annual survey is conducted on the activities of licensed hauliers, and CIE's operations are well documented, but virtually nothing is known about the evolution of the own account haulage sector (i.e., firms carrying own goods in their own vehicles) over the past 15 years. There are also no data

available on the unlicensed hauliers (hackers) who operate in and around the major urban centres. These deficiencies will be remedied by a new comprehensive survey of road haulage, which is to be undertaken in 1979.

2.12 In 1964, it was estimated that CIE rail operations accounted for 16.6% of freight ton mileage, and road freight for the remainder. The 1964 Road Freight Survey showed the following market shares:—

CIE road freight	6%
Licensed hauliers	11%
Own account operations	83%

The figure for own account operations includes the activities of hackers (hauliers operating in zones around Dublin, Cork, Waterford, Galway and Limerick, where operators' licences are not required). Subsequent analysts, Arthur Andersen (2), McKinsey (3) and Kearney (4), have attempted to derive more up-to-date figures, but virtually all are based on extrapolations of the 1964 study. The Kearney study (4) suggested that rail managed to maintain its market share between 1964 and 1972.

2.13 Since 1972, it is likely that rail's share of the market has declined slightly. Table 8 shows the freight ton miles carried on CIE railways. The traffic increased by 15% over the period 1968 to 1972. Since 1972 the ton miles carried have fluctuated and though traffic reached record levels in 1978, this was only some 9% above the 1972 level.

2.14 Table 9 which is taken from the annual survey of the activity of licensed hauliers gives some indication of how the licensed haulage sector of the market has developed since 1969, in terms of tons carried and mileage run. CIE is the most important of the licensed hauliers, with over 25% of the tonnage carried, and about 20% of the vehicle mileage run in 1976. However, its significance has declined in recent years. In 1969, CIE carried about 40% of the total tonnage, and operated about 35% of the total vehicle mileage of the licensed haulage fleet.

TABLE 8

Freight Ton Miles carried on CIE Railways 1968-1978

Year ending 31st March	Number	Index
1968	308,376	100
1969	332,214	108
1970	308,867	100
1971	333,609	108
1972	353,464	115
1973	345,222	112
1974	347,496	113
Nine months ending 31st December 1974	276,345	119*
Year ending 31st December		
1975	347,471	113
1976	363,697	118
1977	364,739	118
1978	385,466	125

Note: *Annualised.

Source: CIE Accounts.

TABLE 9

Tons carried and mileage run by licensed road hauliers 1969-1976

Year	tons carried number (000's)	index	Vehicle mileage run number (000's)	index
1969	9,577	100	50,895	100
1970	9,511	99	48,361	95
1971	9,590	100	49,995	98
1972	10,224	107	53,666	105
1973	10,721	112	58,236	114
1974	10,805	113	62,522	123
1975	10,263	107	63,777	125
1976	11,052	115	72,253	142

Source: Annual Survey of Licensed Hauliers.

2.15 No statistics have been collected on recent developments in own account haulage. The increases that have occurred in the tonnage carried and mileage run by CIE and licensed road hauliers do not appear to have been great enough to cope with the increases in freight traffic. Own account probably now has an even greater share of the freight market than it did in 1964. The Confederation of Irish Industry has suggested that 90% of road freight traffic is carried by own account hauliers. A recent survey, conducted for the National Prices Commission for an enquiry into the road haulage industry, has suggested that expenditure on road transport is divided as follows:

CIE road freight	3%
Licensed hauliers	11%
Own account and hackers	86%

However, the basis of these figures is not entirely consistent with those collected in earlier enquiries.

Conclusion

2.16 Transport takes a very large proportion of Ireland's economic resources, about 16% of GNP net of taxation. It is of considerable importance in household budgets, accounting directly for over 11% of household expenditure. The efficiency of the transport system is thus clearly material to the well being of the Irish economy. Inefficiency in transport arrangements could affect the cost of both exports and imports and hence the attractiveness of Ireland as a location for industry and commerce. Within Ireland differences in the transport available to the regions and counties could have significant impact on the development of the local economy.

2.17 In the last 10 years there has been a growing requirement for transport. The private car and lorry have both increased their market shares at the expense of public transport, and private road transport is now by far the most important mode of travel for passengers and freight. It is difficult to foresee any reversal of this trend. The private car provides a level of personal door-to-door service at any time of the day or night which cannot be matched by any form of public transport that could be afforded. The abolition of annual road fund licences on all cars of up to and including 16 horse power from August 1977 has very

recently had an effect in accelerating the growth of car ownership; but the substantial growth of the Irish economy over the past decade has led to a rapid and prolonged growth in car ownership and this trend is likely to continue. Similarly, it has to be accepted that for a number of movements the point-to-point flexibility of the lorry will offer very substantial advantages over the rail system. Nevertheless, there are freight and passenger journey purposes for which rail is superior. Any future transport policy must recognise these inherent characteristics of the competing transport modes. An efficient transport system cannot rely entirely on private road transport. There are certain services, such as catering for peak passenger flows in urban areas, which public transport can supply more effectively than private transport. The experience of the last few years shows that the pattern of public transport service has generally adapted to match changing circumstances. Losses in traffic in certain areas have often been balanced by gains in traffic elsewhere. There is also a clear social need to provide public transport services to those without access to a private car.

2.18 In the later sections of this report we discuss the role which we consider various public transport services should play in the development of an appropriate transport policy. Before this we discuss briefly the current organisation of the transport industry.

CHAPTER 3

THE ORGANISATION OF THE TRANSPORT SECTOR

3.1 It is difficult, if not impossible, to have an effective transport policy without an appropriate organisational structure. Indeed experience elsewhere has shown that this is an essential precondition to the development and implementation of satisfactory policies which combine, as effectively as possible, the comparative strengths of the various transport modes. For this reason we describe in this chapter the current organisational structure in the transport sector. In a subsequent chapter (see Chapter 10) we suggest modifications designed to provide a revised structure, more sensitive to the changing requirements of the Irish transport system.

Central Government

3.2 Within central Government two Departments have a direct interest in transport, the Department of Tourism and Transport and the Department of the Environment. Two others have an indirect, but nevertheless, important interest in transport: the Department of Economic Planning and Development and the Department of Finance. Other Departments with lesser but significant interests include the Department of Justice, responsible for the Gardai, and the Department of Labour, responsible for controlling the working hours of road haulage drivers.

The Department of Tourism and Transport

3.3 The Department of Tourism and Transport was constituted as recently as 1977. Its transport responsibilities were previously carried out by the Department of Transport and Power which preceded it. Its main transport functions are:

- (a) being the Department to which Córas Iompair Éireann (CIE), the semi-State body responsible for most public transport operations, reports;
- (b) the formulation and development of transport policy as it affects the railways, road freight and public road passenger services.

As such, it has been responsible for the transport legislation proposed and passed in recent years.

3.4 As a result of its relationship with CIE, the Department has to agree on appropriate levels of subvention for CIE, and approve its levels of investment in consultation with Department of Finance. In pursuit of these duties it receives CIE policy documents such as periodic Rail Development Plans and business plans, and in formulating its views on them it must discuss with CIE certain aspects of operational policy including proposed price increases. The Department of Finance requires expenditure on both the subvention and investment to be monitored monthly and to be reported to it through the Department of Tourism and Transport.

3.5 The Department's supervision of vehicles using the road system covers licensing and regulation of private bus operators and the road haulage industry. Only one bus operator is allowed on any route, so competition is effectively prohibited where CIE is willing to provide a service. Elsewhere, private bus operators are granted licences provided that they can satisfy the Department on such matters as the type of vehicle to be used and on time-tabling, but considerable flexibility on this is granted in rural areas so long as passenger safety is not jeopardised.

3.6 The road freight industry has been subject to a variety of legislative restrictions since the 1930s. They have been amended from time to time through, for example, the 1971 and 1978 Transport Acts. However, an unchanging feature of Government policy has been a restriction on the number of licences available to those who wish to undertake road freight carriage for hire and reward. While there are no restrictions on the number of vehicles enterprises that carry their own

goods can operate (known as own account operations), industrialists are not allowed to use such vehicles to carry goods for anyone else or, generally, to finance their purchase through leasing.

The Department of the Environment

3.7 The Department of the Environment has also only existed under its present title since 1977; it was previously called the Department of Local Government. Its principal transport responsibility relates to the roads. The Minister for the Environment is responsible for central administration of matters relating to the public roads, including supervision of, and assistance to, the local road authorities. But those authorities have the duty of planning, constructing, maintaining and improving all the public roads in their area. The Department gives 100% grants, specific to individual schemes, for work on the improvement and upkeep of the national primary and secondary roads. Block grants are provided to county councils and urban councils for such items as the improvement and upkeep of urban roads and for traffic management schemes. Local finance is also available for these purposes, though new arrangements have evolved in the light of the Government's decision to abolish rates on domestic dwellings and on certain other property. Close liaison is maintained with the local authorities by the Department's engineering inspectors. Co-operation is particularly important in the major urban areas, especially Dublin, where road planning has developed as a joint venture between central and local Government.

3.9 The Department has never published any ongoing roads plan, setting out the intended priority routes and areas for future expenditure. However, the Government now intends to do this, and the recent green paper on Development for Full Employment (5) stated that work on the Road Development Plan was well advanced.* This plan will set out the parts of the road network which are to be improved over the next ten years and an important input to it will be provided by the An Foras Forbartha *Road Needs Study*, prepared for the Department in 1974 and updated in 1978. This report identified the parts of the national road

*Since this was written, the *Road Development Plan for the 1980s* (Pri. 7967) was published (on 4 May 1979).

network where standards were likely to be lowest in the years ahead, and provided estimates of the costs of improving them to a number of alternative standards.

3.10 In addition to its road responsibilities, the Department is involved in more general areas of transport through its role in local transportation studies. Studies of Cork and Galway have recently been submitted to the Minister, and the Department was involved directly in the 1971 transportation study in Dublin. Inevitably, such plans cover public transport as well as road issues.

3.11 The Department is responsible for executing policies controlling the quality of vehicle operation. For example, there are restrictions on the maximum size and weight of lorries. It also has powers to require the periodic testing of all sorts of vehicle, under Road Traffic Acts, though these powers have not yet been exercised. The Department's activity in these quality control areas is becoming increasingly important as a result of EEC membership.

The Department of Economic Planning and Development

3.12 The Department of Economic Planning and Development has widespread responsibility for economic and social planning at national, regional and sectoral levels, and for the formulation and co-ordination of Government plans and policies. Given the importance of transport in the Irish economy, particularly its sectoral and regional importance, and the division of responsibility for transport matters between central and local Government, between two different Departments of State, and between Government and CIE, inevitably the Department of Economic Planning and Development has an interest in transport policy.

The Department of Finance

3.13 The Department of Finance is responsible for co-ordinating action, on behalf of Government, on the annual Estimates and the Budget, and for advising on sources of taxation. Therefore it has an interest in the subvention to CIE. The previous chapter has emphasised that transport is a large user of resources. It is also a major consumer of public expenditure and source of tax revenues. In the circumstances,

the Department of Finance's responsibilities for public expenditure and for the annual Budget require that it should pay close attention to the problems of transport.

Córas Iompair Éireann (CIE)

3.14 CIE is a State-owned body responsible for the operation of the railway system, the bus services in Dublin and in the provinces, the country's largest road freight business and of several other minor services. It was created under the 1944 Transport Act which combined the bulk of the railway system with the Dublin United Tramway Company. A major objective of this reorganisation was to allow cross subsidisation between the profitable Tramway Company and the railway system. Subsequent Transport Acts, in 1950, 1958, 1964 and 1974 have brought some changes in CIE's organisation, legal obligations and financial responsibilities, but the basic administrative structure of a single body responsible for public transport has been maintained unchanged.

3.15 CIE is now not particularly heavily burdened with legal constraints, compared to transport undertakings in other parts of the world. There is no common carrier obligation, and CIE is permitted to refuse traffic. The position following the 1958 Transport Act has been succinctly put by McGrath (6) "subject only to the obligation to continue to provide existing train services (unless they are considered by the Board to be uneconomic and are expected to remain so), the mode of carriage, the nature and extent of the services provided, the right of any individual to avail of them and the charges to be made therefore are now all at the discretion of the Board to the extent, at any rate, that they are not subject to any legal enforcement". Before 1958, there were obligations to bestow equal treatment, to afford reasonable facilities and to avoid undue preference. The duties now in force are those imposed by the 1958 Act which are less definite and require CIE to provide reasonable, efficient and economical transport services.

The Local Authorities

3.16 The main responsibilities of the local authorities have already been discussed in describing the Department of the Environment's role, and in particular their duties for the planning, improvement and upkeep

of the road system. However, particularly in the cities and towns, the local authorities' general planning responsibilities also give them an interest in all aspects of transport. The major urban areas prepare plans from time to time and must in any case review them at five yearly intervals.

The Gardai

3.17 The police authorities, which are responsible to the Department of Justice, are the principal enforcement agency for all transport legislation, including road freight licensing provision, and safety requirements such as regulations on lorry weights and the regulation of traffic. In certain areas, principally the centre of Dublin, they have been assisted by traffic wardens, whose responsibilities are restricted to the regulation of parking and do not extend into traffic control. However, traffic wardens have recently almost disappeared in Dublin, and their responsibilities are being resumed by the police. In contrast to many other countries, there is no separate agency with vehicle testing responsibilities to ensure that road vehicles observe basic mechanical safety requirements, or to control such matters as drivers' hours or to inspect vehicles to ensure that drivers have the right documentation.

An Foras Forbartha

3.18 An Foras Forbartha is a State institute with widespread research responsibilities in the fields of construction, development, and physical planning. As such, it has close links with the Department of the Environment, though its role in transport policy is non-executive. It prepared the *Road Needs Study*, and it provided a major input to the Dublin Transportation Study. In addition, An Foras Forbartha is responsible for the collection of statistical information, particularly on road accidents.

Conclusion

3.19 In Ireland, as in most other countries, the Government has a large stake in the transport sector. CIE is State-owned, the roads programme is under the control of central and local Government, and private bus operators and road freight carriers are required to operate within a legislative framework. The private motorist is also subject to

regulations, especially in the major towns where he is affected by policies on parking and other measures of traffic restraint designed to improve the efficiency with which the available road space is used.

3.20 A significant feature of the current organisational structure is that at present there is no one Government Department with overall responsibility for transport policy. Road planning, construction and maintenance and vehicle and driver controls are the responsibility of the Department of the Environment while the formulation and development of transport policy as it relates to the railways, road freight and public road passenger services is the responsibility of the Department of Tourism and Transport. Other Departments have less direct an interest. The greatest problems of co-ordination arise in urban transport policy where several central Departments, CIE, the Gardai and often more than one local authority are likely to be involved. In Chapter 10 we discuss the extent to which this lack of formal co-ordination may affect adversely the development of an effective transport policy.

CHAPTER 4

THE RAILWAY SYSTEM

4.1 In this chapter we consider the railway services provided by CIE, which are only one component of the public transport services it operates. The two main reasons for considering them first are:—

- (a) CIE has a general policy of operating other parts of its organisation as complementary to the railway. A recent policy statement by the Chairman (7) states explicitly that the road freight activity of CIE will complement the railway, not compete with it. The same statement sets out a similar approach for road passenger services, which are to be co-ordinated with the railway. Thus express bus services are mainly operated in areas not served by the railway, but bus services along routes also served by rail and designed primarily for traffic en route except in as much as express buses are sometimes run where there is not enough traffic to schedule a train. In addition, as a matter of policy, rail and bus fares are set at roughly equal levels for parallel journeys, although there may be differences in either direction. Where such differences do arise, the rail fare is generally the higher of the two.

- (b) The railway now absorbs a substantial proportion of the public sector funds allocated to transport. Irish railways have never been particularly profitable; one of the motives for the creation of CIE in 1944 was to allow the railway to be subsidised by the profitable Dublin United Tramway Company. However, the past ten years have witnessed a sharp and progressive deterioration in the railway's financial position, both in its own right and in relation to the other parts of CIE's operation.

4.2 In this chapter we first consider the financial position of the railway. We argue that despite temporary improvements there is no likelihood of the railway system ever again operating without subvention. We next consider the social arguments for the rail system and discuss whether these appear to be sufficient to outweigh the financial costs. Finally, we discuss the relationship between Government and CIE, and how it should be adjusted to reflect the realities of the current situation in which the railways are essentially providing a social, that is, a non-commercial service.

Financial Position

4.3 Irish railways have been losing money for many years. It was as long ago as 1958 that the Government first introduced the principle of a planned subvention for CIE, by passing a Transport Act which granted CIE a subsidy over a five-year period, primarily to enable it to reorganise and modernise the railway system. Originally, it was intended that CIE should break even by 31st March 1964, and there were substantial cutbacks in the size of the rail network between 1958 and 1963 to help achieve this. However, the objective was not met. By 1964, the Government concluded that the target was unrealisable in Irish conditions, and introduced a further Transport Act which granted CIE an annual subsidy of £2 million for five years, principally to enable it to operate unprofitable rail services.

4.4 For the first time it had been acknowledged that losses were likely to be a continuing feature of Irish rail operations, though the hope was expressed that after 1969 the subsidy payable would decline as a proportion of gross revenue. The Minister of the day had decided that the public could accept a subsidy of about 25% of railway revenue, albeit with reluctance, and that this level of subsidy would be justified in terms of the social benefits which CIE rail services conferred. The period between 1964 and 1969 was one of comparative stability, though there was no reduction in the size of the railway's losses. In 1969 the annual grant was raised to £2.65 million for a further period of five years.

4.5 However, a subvention on this scale proved inadequate almost immediately. In 1970/71, CIE's losses exceeded £6 million, virtually all of which were accounted for by the railway, and the Government was forced to pay additional grants over and above the 2.65 million. At the same time, in the autumn of 1970, the Government established a committee to examine CIE finances and the committee commissioned the McKinsey Report (3). This report recommended further rationalisation of the railway, and it was expected that this would lead to improved financial performance. Losses continued to grow. In 1972/73, for the first time, the rail deficit was more than 50% of revenue and in 1974 another Transport Act was introduced.

4.6 This Act acknowledged that the annual grant of £2.65 million had proved completely inadequate. It introduced new arrangements for paying subventions to CIE in the light of EEC regulations, which require that subventions to all transport undertakings should be based on explicit criteria. The relevant regulations are:—

- (a) Regulation 1191/69, which permits payments to transport undertakings by the State for losses incurred on services operated under public service obligations, i.e., in situations where adequate transport services are deemed essential, but cannot be provided profitably.
- (b) Regulation 1192/69, dealing with the normalisation of accounts of railway undertakings, which permits payments to be made by the State for financial burdens to which other transport undertakings are not subject. In the case of CIE this regulation is applied to certain superannuation and pension costs, and to 50% of the costs of level crossings.
- (c) Regulation 1107/70, which specifies a number of further circumstances in which grants are permitted, including infrastructure costs borne by transport undertakings where other undertakings are not subject to a like burden, and various public service obligations not covered by regulations 1191/69. The regulation also permits payments to cover residual deficits not covered by other regulations where harmonisation measures necessary to make the undertaking financially autonomous have not been completed.

4.7 Under EEC policy it is not permissible to pay grants over and above those permitted under the various regulations. However, there are substantial differences in the way in which countries interpret these regulations, which are not sufficiently specific for it to be possible to determine a maximum allowable subvention for rail operations. Consequently there has never been any difficulty in providing increased subvention payments for CIE. The railway losses have continued to grow, and since 1976 the deficit has consistently exceeded receipts.

4.8 Table 10 below sets out the financial position of CIE's rail operations over the last ten years, both in their own right and in relation to other parts of CIE. It shows the rail deficit rising from £3.2 million and 23.8% of expenditure in 1968 to £31.0 million and 51.2% of expenditure in 1978. By any standard the rail services are now heavily subsidised.

4.9 The railway's worsening financial situation has occurred against a background of rises in prices generally. Table 11 compares the change in railway revenue and expenditure with changes in the consumer price index. These figures show that recent declines are due to both receipts failing to keep pace with inflation, and expenditure outstripping the inflation rate. The two factors are of roughly equal importance over the period as a whole, but it is noteworthy that their relative importance has changed over time. Until March, 1974, receipts kept roughly in line with prices generally, and the main problem lay on the expenditure side. Thereafter, until 1977, the failure of receipts to keep pace with inflation was the principal problem. Indeed, as a result of major initiatives to improve performance, expenditure fell in real terms in 1976 and 1977. In 1978, both receipts and expenditure rose in real terms, at roughly the same percentage rate.

4.10 It is important to note that the charges made for rail services, both passengers and freight, have fallen substantially in real terms since 1975. Less than half of the expenditure of the railway is now financed from revenues. McKinsey (3), examining CIE operations for 1969/70, concluded that just over 60% of the costs of rail operations were variable (i.e. the cost of train working and of terminals). Current receipts are therefore unlikely to cover even the variable costs of rail operations.

TABLE 10

CIE Receipts and Deficits 1968-1978

CIE Receipts (£000)	CIE Deficit (£000)	Deficit as % of expenditure								
			Overall	Railway only	Overall	Railway only	Overall	Railway only	Overall	Railway only
Year ending 31st March										
1968	27,396	10,195	2,480	3,193	8.3	23.8				
1969	31,197	11,363	1,961	3,174	5.9	21.8				
1970	34,232	11,910	3,234	4,212	8.6	26.1				
1971	36,868	12,668	6,171	5,964	14.3	32.0				
1972	43,016	14,604	6,493	6,714	13.1	31.5				
1973	45,906	15,036	8,476	7,646	15.6	33.7				
1974	53,074	17,125	11,666	9,611	18.0	35.9				
Nine months ending 31st December										
1974	42,570	14,100	14,638	10,590	25.6	42.9				
Year ending 31st December										
1975	67,020	20,271	28,018	20,163	29.5	49.9				
1976	77,940	23,262	33,565	24,155	30.1	50.9				
1977	89,069	25,604	33,755	27,366	27.5	51.7				
1978	101,692	29,520	37,911	30,985	27.2	51.2				

Note: 1978 figures are subject to audit.
Source: CIE Accounts.

CIE Rail Operations, Expenditures and Receipts 1970 - 1978

TABLE 11

Year ending 31st March	Expenditure Index	% change on previous period	Revenue Index	% change on previous period	Consumer Price Index	% change on previous period				
							1970	1971	1972	1973
1970	100.0	15.7	100.0	6.5	100.0	9.2				
1971	115.7	14.3	106.5	15.1	118.8	8.8				
1972	132.2	6.4	122.6	3.0	129.3	8.8				
1973	140.7	17.9	126.2	13.9	145.2	12.3				
1974	165.8	23.1	143.8	9.8	168.3	15.9				
Nine months ending 31st December										
1974	204.2	157.9	157.9	168.3						
Year ending 31st December										
1975	250.8	22.8	170.2	7.8	198.8	18.1				
1976	294.1	17.3	195.3	14.8	234.6	18.0				
1977	328.6	11.7	215.0	10.1	266.6	13.6				
1978	375.3	14.2	247.9	15.3	287.0	7.6				

Sources: Derived from Table 10, Central Statistical Office.

4.11 This state of affairs is depressing, but not entirely surprising. Railways are unprofitable in most countries in the Western world, though international comparisons of financial performance are rendered virtually impossible by long-term differences between countries in capital structure and other financial arrangements. However, if more physical aspects of performance are examined, Irish railways show up poorly by comparison with other EEC countries. Table 12 shows that Ireland has the least used railways in the EEC. As a result, the productivity of the rail system is low. Table 13 shows comparative productivity indicators of the use of assets and labour for all EEC railways. It can be seen that the Irish system has a particularly low passenger usage per kilometre of track. This reflects the relatively light demand on the main radial services compared with the demand between the larger European cities, and also the absence of a substantial commuter system. The low level of freight carrying per employee reflects the relative lack of demand for bulk freight movements.

TABLE 12

Comparative Statistics on Railway Usage in EEC Countries in 1975

Country	Passenger km travelled per head of population	Tonne km of freight carried per head of population
Germany	633	926
France	1,040	1,313
Italy	699	298
Netherlands	691	221
Belgium	810	715
Luxembourg	707	1,988
U.K.	556	431
Denmark	693	374
Ireland	313	196*

Note: *Not available in published volume; calculated from CIE accounts.

Source: EEC, *Statistical Yearbook on Transport, Communications and Tourism*.

TABLE 13

Comparative Statistics on Railway Usage in 1975

Country	Thousands of passenger km travelled			Thousands of tonne km of freight carried per employee†
	per km of line worked	per employee†	per passenger seat	
Germany	35,222	94	706	138
France	19,207	180	619	227
Italy	23,021	162	420	69
Netherlands	62,409	321	1,437	103
Belgium	47,559	127	648	112
Luxembourg	40,324	56	1,091	158
U.K.	39,390	119	650	92
Denmark	49,876	153	964	83
Ireland	6,925	85	535	53*

Notes: †Based on total number of railway employees.

*Not available in published volume; calculated from CIE accounts.

Source: EEC, *Statistical Yearbook on Transport, Communications and Tourism*.

4.12 CIE is well aware of the problems associated with its rail operations and has done much in recent years to improve efficiency, by eliminating very lightly used passenger services and by mechanising the carriage of freight, particularly sundries. There has been a complete ban on staff recruitment, and many staff have left on voluntary redundancy terms, with the result that staffing levels have fallen by over 20% in the past three years. At the same time, demand, as measured by passenger mileage and freight ton mileage, has risen by about 10%.

4.13 CIE believes that its performance could be on a par with that of other EEC railways, if the Government granted sufficient funds for investment. It is apparent that capital expenditure would be required to achieve this result, since CIE is already working its rolling stock at close to full capacity, and we discuss below the case for such investment. However, we doubt whether utilisation rates on a par with other EEC

countries could ever be achieved. The comparative advantage of rail over road is greatest where there is a high density of population, where the *per capita* level of industrial output is high and a large proportion of it entails inputs or outputs transported in bulk, and where traffic is moving without transshipment over long distances. From this standpoint it has to be recognised that because of its geography and to a lesser extent because of the make-up of its economic output, Ireland is among the least favoured nations for operating a commercially successful railway, however efficient that railway may be.

4.14 In the short term, CIE expects its retrenchment programme on the railway, which is now well advanced, to be reflected in improved financial performance. CIE in a policy statement by the Chairman early in 1977 (7) have set themselves the ambitious objective:—"to aim at a position where the shortfall on railway operations does not exceed a fixed sum at 1975 values, provided that a reasonable rates and fares policy is permitted". As a result, the deficit should fall from 51% of total costs in 1976 to 38% in 1980. The target is to be met by reducing costs by £1.19 million over 1976 levels, through staff cuts, and increasing revenue by £5.28 million (both at 1976 prices). We believe this objective to be a feasible one. Voluntary redundancies have imposed costs in the past couple of years which will not recur, and which will lead to reduced labour costs in years to come. Traffic levels have recently been increasing.

4.15 We are less confident whether CIE will be able to maintain this target indefinitely. Many of CIE's assets are reaching the point where they will have to be replaced if the service is to be continued. These assets were originally purchased at a time when prices and interest rates were far lower than they are today. This is not a major problem in so far as the renewal of railway lines and works is concerned, where a provision is made in the accounts for replacement expenditure, based on actual expenditure incurred over the preceding four years and forecast expenditure for the year ahead. It is a far more significant issue where railway rolling stock is concerned. These assets are depreciated on a historic cost basis, and CIE has argued that much of the coaching stock, for example, on the Dublin suburban services, has reached the

end of its useful life and requires replacement. The increased depreciation and interest charges to which their replacement will give rise are bound to have a deleterious effect on financial performance.

4.16 Railway operations are also labour intensive, even after recent cutbacks. If economic growth is maintained, then it is inevitable that wages and salaries will rise in real terms, on the railway as well as elsewhere. Unless labour productivity on the railways continues to rise at a faster rate than would in the long run seem technically possible, the costs of running the railway are likely to rise more rapidly than the average for the economy as a whole.

4.17 Car ownership has increased rapidly during the last decade, particularly since the abolition of the annual road tax for the majority of cars in mid-1977. Even so it is at present low by comparison with other EEC countries. It must be expected to rise especially strongly because experience elsewhere suggests that car ownership levels are likely to increase most when incomes rise where population density is low. The new policies on roadbuilding and road freight transport to be discussed in later chapters will enhance road transport's ability to compete with rail. Even if there was a halt to these policies, experience in Europe shows that the most drastic policies to compel traffic to move from road to rail will not eventually prevent a secular decline in rail's share of all passenger and freight traffic.

4.18 We consider that these three factors, the likely cost of asset replacement, the high labour intensity of the railways and growing competition from cars and road freight transport will in the long run make it increasingly difficult to maintain any fixed financial target without either increasing fares (in real terms) or achieving substantial cuts in operating costs.

4.19 At least in the short run, higher rates and fares probably would lead to an improvement in the railway's financial viability. CIE has produced estimates of the price elasticity of demand for its rail passenger services (that is of the responsiveness of traffic to changes in fares) which are quoted in a report for the National Prices Commission (8). The figures relate to the year 1971, and are therefore somewhat

out of date, but they are the most recent available. The elasticity is estimated at 0.7 to 0.8, which implies that a 1% increase in fares would reduce use by between 0.7% and 0.8% and hence lead to a slight increase in total revenue. These estimates are high by international standards, and it is likely that, by concentrating increases on specific sectors of the market, losses of passenger traffic could be kept below the levels that these elasticity estimates imply.

4.20 More importantly, the elasticity estimates do suggest that a general policy of cutting fares is most unlikely to be financially attractive. The extra traffic would be unlikely to compensate for the loss of revenue from existing traffic. The most hopeful way of increasing railway revenue would be to offer selective incentives to particular travel groups which do not at present use the railways, whilst maintaining fares for existing categories of users. CIE experimented with a number of marketing initiatives of this sort in 1972 and 1973, but found that the impact on revenue was small (8). The fares structure now consists of only four fares: the single fare (which is also the day return fare); the monthly return fare; the four day return fare; and the weekend return fare (7). Other special promotions are conducted from time to time. We are convinced that CIE should continue its endeavours to devise promotional initiatives that increase railway use and revenues without losing revenue from existing travellers. However, as other railway undertakings have found, such policies are far from easy to devise in practice. We doubt whether further schemes could by themselves have a significant effect on railway viability.

4.21 No estimates are available of price elasticities for rail freight traffic. However, it is clear that CIE is subject to strong competition in the freight market from road haulage, and as such it is unlikely that significant increases in rail freight rates could be achieved without losses of traffic. Recently, it has been CIE policy to concentrate rate increases on highly unprofitable freight-carrying activities (e.g., for the Department of Posts and Telegraphs), and on bulk-carriage activities which were unlikely to divert from rail to road. If road freight charges rose sharply, then this would present an opportunity for increasing rail freight rates. The introduction of stricter drivers' hours limits and other quality controls under EEC regulations (see Chapter 7) will raise road

haulage costs, perhaps by between 10% and 25%, and possibly more. This would enable CIE to increase rail freight rates to a similar extent without loss of traffic. However, the existence of competition from road freight services inevitably means that there is a limit on the potential for any increases.

4.22 We therefore conclude that there is little prospect of higher rates and fares enabling the railway to cover a significantly greater proportion of its costs, even if the increases were politically acceptable. To illustrate the point further, it is instructive to consider the present position where revenue is covering only half the costs incurred, and assume that the price elasticity, for passenger and freight traffic, is 0.5. To break even would then require a fourfold increase in charges, and would be accompanied by a 50% reduction in traffic levels, assuming no change in levels of costs. This calculation is purely illustrative; whilst the public response to a limited price increase might be represented by an elasticity of 0.5, the response to a fourfold increase in fares would undoubtedly be greater. The illustration does, however, show that there is no practical possibility of putting the railway on a fully commercial footing just by raising prices.

4.23 We also doubt the extent to which CIE can make major savings by further increases in productivity. Doubtless there are ways in which more cost savings could be made but, given the information available to us, and on the best comparisons we can make, we think it would be misleading to suggest that there is much "fat" which could be cut to produce dramatic rises in productivity. Within the constraints of railway technology, and bearing in mind the types of traffic for which railways are suitable, we believe CIE has a far from inefficient railway organisation. In the very recent past, it has substantially trimmed its labour force and undertaken many economies. The scope for further economies may be less substantial.

4.24 We have also considered two other ways in which the financial position of the railway system might be improved. First, major investment might so enhance the attractiveness of rail travel that revenue increases would be achieved that were sufficient to both finance the investment, and reduce the rail deficit. Second, reductions might be made in the existing network and standard of service.

4.25 In considering either of these types of policy there is an important distinction to be made between two different methods of considering the financial viability of the railway. The first approach is to look at the ratio of revenue to expenditure, often known as the operating ratio. This is the approach adopted by McKinsey (3), and ourselves in the earlier part of this chapter, and it is particularly valuable in looking at trends over time as it illustrates financial deteriorations and improvements independently of the effects of inflation. The second approach is to look at the absolute size of the railway deficit. Any figures presented in purely monetary terms will, over time, encompass the effects of inflation and as such they are inevitably of limited value. It would clearly be unrealistic not to expect the railway deficit to rise in a period of rising prices, quite independently of the performance of CIE. Though price indices can be used to calculate trends in the railway deficit in real terms, even these may present a somewhat unfair picture if, for example, the railway is subject to substantially faster inflation than elsewhere in the economy.

4.26 We do not believe that investment would reduce the absolute size of the railway deficit, although it is possible that it might improve the operating ratio. In 1977, the railway earned revenue of £25.6 million whilst incurring expenditure of £53.0 million. If, as an example, we take a £200 million investment programme over and above present investment levels this would, at a 12% interest rate, generate annual interest charges of £24.0 million. The depreciation charge, based on a twenty year asset life, would be £10.0 million. Thus overall railway expenditure would rise by £34.0 million, or some 64%. In this situation, CIE would require an increase in revenue of £16.4 million (64%) to maintain a constant operating ratio. A constant level of railway deficit would require an increase in revenue of £34.0 million (133%). We greatly doubt whether higher fares or increases in passenger and freight volume could generate a 64% revenue increase, and a 133% increase seems totally unrealistic.

4.27 These examples are illustrative. We have received no indication of CIE's long term investment intentions for the railway. Although they have made plans, they are unable to permit us to have access to them. Nevertheless, we believe the figure for investment of £200 million is

reasonably realistic, although we may have substantially overestimated the effect on the railway revenue requirement if much of the investment had the effect of reducing operating costs, to offset the interest charges and depreciation provisions.

4.28 However, this will not effect the general conclusion, that CIE will find it considerably easier to improve the operating ratio than to reduce the size of the railway deficit. Unless the size of the deficit is reduced, then it cannot be argued that financial viability has been improved, though this is not to say that the investment could not be justified on the social criteria which we discuss below.

4.29 The second possibility is a further contraction in the size of the present system. It is often argued that such contractions lead to a greater reduction in revenue than in costs, since costs are lumpy and indivisible and difficult to reduce. Such conclusions are heavily dependent on the time scale over which the costs are considered. A far higher percentage of costs is avoidable within a timescale of, say, five years than six months. Information is not readily available on the periods over which various CIE costs are escapable, but CIE have advised that revenue exceeds the avoidable costs of operation on all the radial routes linking Dublin to the other major urban centres. Although we do not have sufficient information to contradict this we would draw attention to the fact that total revenue from rail operations as a whole is at best only covering the costs of train working and terminals. Bearing in mind that revenue/expenditure comparisons are far more favourable on, for example, the route from Dublin to Cork than on other lines, in particular the non-radial routes, we expect that the absolute size of the loss could be reduced by cutting back the system. However, such measures would take time to exercise their influence, and we would not expect any improvement to be sudden or dramatic. Moreover, they would certainly not lead to full financial viability since no line earns revenues sufficient to cover the full costs of operation including overheads.

4.30 Furthermore, it should be borne in mind that, with the possible exception of one or two minor non-radial routes, the Irish rail system has now effectively been rationalised close to its minimum effective

working size. The closure of any one of the radial routes from Dublin would mean that Ireland ceased to have a truly national railway system. The reduction in losses and improvement in the operating ratio arising from a policy of partial closure would be small, and we would suggest that there would be relatively little financial gain from such a policy. The crucial question is whether the social benefits of retaining the system as a whole outweigh the substantial financial costs. The social benefits derived from the system are discussed in the next section. The rapid increase of the railway deficit may have been halted and there are also some prospects of a reduction of the deficit in the next few years. Nevertheless, the long-term financial prospects for the railways seem to us to be inevitably bleak. There is no chance of a financially viable railway system, and in the long run it will be increasingly difficult to maintain the deficit at its current level in real terms.

The Social Case for the Railways

4.31 If it is accepted, and it has been accepted by the Government since at least 1964, that financial viability is an unrealistic target, and if it is also agreed that in the long run, the rail deficit is likely to remain a substantial proportion of rail revenues, even allowing for temporary improvements, how that deficit is monitored and controlled becomes a matter of ever-increasing significance if CIE efficiency is to be maintained and the waste of public money avoided. But before considering how that might be done, it seems to us inevitable that the fundamental issue should be faced. If it is granted, as seems likely, that cutbacks in the rail network will do little to increase the proportion of expenditure that is covered by receipts, then is the social case for keeping a railway strong enough to justify subsidies on the required scale? Ultimately deciding whether all or part of these funds are spent on CIE rail services or are transferred to other public expenditure programmes such as education, health and employment creation or are used to reduce taxation, is a question of political priorities as in relation to other areas of expenditure. Even so analysis can help inform political judgement, especially if it can be argued that some or all the social objectives could be achieved more effectively by other means. In so far as such cost effectiveness arguments are persuasive, the social case for retaining the railways is diminished.

4.32 In the rest of this section we therefore consider the main social arguments that have been advanced in favour of the railway system. They are that it is needed:

- (a) to provide basic transport facilities to those who do not have a car available;
- (b) to relieve road congestion;
- (c) to encourage regional development;
- (d) to further policies of income redistribution;
- (e) to carry dangerous goods;
- (f) to reduce road accidents;
- (g) to protect the environment;
- (h) to conserve energy; and
- (i) to maintain employment.

(a) To provide basic transport facilities

4.33 It is often argued that rail passenger services are needed to provide basic facilities not only to those without cars but also to others in a family whose car is used by one member; particularly the elderly, invalids and school-children. Because of the contraction of the railway network, rail is no longer a possible form of transport for most such journeys, yet where there are still railways, retaining local stopping services can be justified on this ground. Moreover, railways may often offer a better service than buses can in terms of speed and comfort.

4.34 Yet there are strong arguments on the other side. Railways are best suited for the provision of fast express services; but these are not the services which are needed as basic facilities for those without cars. Their general need is for local stopping services. Mixing express and stopping trains can create difficult operational problems which can be met only by substantial expenditure to provide or keep the necessary track capacity or by a decline in the quality and therefore competitiveness of the express services. A more fundamental point is that a cheaper and more cost effective service for those without cars can almost invariably be provided by buses. They have the advantage of more frequent stops and can generally approach nearer to giving a door-to-door service. Because of this, though speeds may be higher by train, actual origin-to-destination journey times are often lower by bus.

Against the greater comfort of rail must be set the possibility that, for a given sum, more bus than rail services can be provided. More routes can be served, and the same routes can be served more frequently.

4.35 Our conclusion is that keeping railways is unlikely to be the most cost effective method of serving this particular objective. For all but the longer inter-city journeys and for some movements in Dublin itself (see Chapter 9) the bus normally offers a cheaper and better service to those unable to use a car. When we consider the objections to withdrawing such services in country areas, for example in such areas in the United Kingdom, the main unsentimental reason is the often well-founded belief that no adequate bus service will be provided in lieu. We discuss in Chapter 5 if the current level of rural bus services is adequate or whether there is a case for selective expansion and subsidisation; but to keep a rail service merely because the machinery is not there to provide a satisfactory bus service instead must be a second best solution.

(b) To relieve road congestion

4.36 A sound economic reason for keeping railways, even where they are unprofitable, is when it can be shown that the economic costs that would be caused by increased road congestion if all their traffic were transferred on to the roads would exceed the savings from closure. Where roads are already congested, a small increase in traffic can have a disproportionate effect in reducing speeds and therefore in increasing operating costs and journey times. As will be discussed in Chapter 9, in major urban areas and particularly in Dublin this is an important reason for keeping and possibly expanding suburban rail services. The mainline services also contribute to the prevention of urban congestion in that, for example, freight traffic arriving at the port of Dublin to travel to the West of Ireland can be sent by rail, rather than using the heavily congested streets of Dublin.

4.37 Elsewhere the argument has less substance. First, only a small proportion of total passenger and freight traffic is carried by rail. If all rail traffic were to shift on to the roads, it would at most be equivalent to two or three years' traffic growth. The concentration of most of this traffic on a few main roads would have a substantial impact on congestion; so that in the very short run there may well be a strong

argument on this ground for not closing down the main rail routes. However, in general highway investment is a more cost-effective remedy for road congestion than are rail subsidies. Outside the main urban areas new highway plans (to be considered in Chapter 6) would, if realised, mean there would be no shortage of road capacity if the railways were to be closed down, even on roads parallel to the railway. Moreover, while it is true that road-users do not pay directly for the congestion costs they impose on others, we argue in Chapter 6 that road users' tax payments are more than sufficient to cover the costs of providing, maintaining and policing the road system so that they are more than probably meeting the social costs of the congestion they cause already, again outside the urban areas.

4.38 We conclude that outside urban areas, relief of road congestion is unlikely to be a substantial argument for retaining the railways if current highway plans are realised.

(c) To encourage regional development

4.39 The Government has made and continues to make efforts to encourage the expansion of cities such as Galway, Limerick and smaller towns in the West of Ireland. Regional incentive schemes have encouraged industries to set up in the West of Ireland which might otherwise have been expected to locate in the Dublin region and many industrialists would prefer their sites to be rail connected. It is sometimes argued that the provision of adequate rail services demonstrates that the Government is fully committed to the development of the regions concerned. The provision of a rail service acts as a direct stimulus to economic development, and in its absence there would be a lower level of economic activity in the West of Ireland. The railway is, therefore, an essential element in the Government's regional strategy.

4.40 On the other hand, there are other ways for the Government to show such commitment and stimulate regional development which would provide greater benefits to those that have to be persuaded to move to the West of Ireland. Industrialists are likely to put good road access, particularly to Dublin and the main ports, above subsidised rail connection, and the provision of transport infrastructure, road or rail, may prove less effective than more direct financial incentives.

4.41 Therefore we doubt that rail subsidies to retain a rail network are a cost effective method of promoting regional development. Again the shortness of the distances involved are against the railways.

(d) *To further income re-distribution*

4.42 Because public transport is more likely to be used by the poor the case for retaining railways is often argued as a means of in effect redistributing income from the more affluent, through general taxation, to the poor.

4.43 The following table shows the share of total household expenditure that is accounted for by train and bus fares for a number of income groups:

TABLE 14

Household Expenditure Accounted for by Train and Bus Fares in 1976

Weekly Income (£)	Average Expenditure and % of Total Household Expenditure accounted for by	
	Train fares	Bus fares
0-15	2.3p	5.2p
15-20	—	13.9p
20-25	3.8p	13.7p
25-30	1.4p	52.5p
30-40	0.1p	32.9p
40-50	7.0p	77.9p
50-60	12.7p	79.6p
60-70	11.0p	87.4p
70-80	9.5p	113.5p
80-100	29.7p	124.3p
100-120	25.4p	154.4p
120-150	30.5p	146.8p
150+	46.3p	191.2p
Average	17.0p	97.4p
	0.16%	0.37%
	0.00%	0.64%
	0.15%	0.55%
	0.04%	1.64%
	0.00%	0.82%
	0.14%	1.56%
	0.22%	1.35%
	0.16%	1.29%
	0.11%	1.37%
	0.34%	1.43%
	0.23%	1.41%
	0.25%	1.22%
	0.30%	1.26%
	0.23%	1.18%

Source: Household Budget Survey: Annual Urban Inquiry: Results for 1976.

Though there are undoubtedly some commuters and other travellers who are both poor and using the railway, this table demonstrates clearly the ineffectiveness of rail subsidies as a general policy for helping the poor. Not only does expenditure on train fares rise with income, but it also increases with income as a percentage of total household expenditure. The average household devotes 0.23% of its total expenditure to rail fares, but all household groups with an income below £80 per week are below this average, while all household groups earning over £80 a week are at or above it. Nor is this particularly surprising. In Dublin, for example, suburban rail services are most likely to be used by the relatively affluent who can afford to live in the more desirable suburbs. The further out commuters live, the more they benefit from subsidised rail services since they travel further.

4.44 The table also shows that bus subsidies are likely to be equally ineffective as a means of helping the poorest households. Expenditure rises steadily with household income, and is very low in households with incomes below £25 a week. However, there is a tendency for the percentage of total expenditure accounted for by bus fares to fall in the highest income groups. Hence, bus subsidies will probably prove slightly more effective than rail subsidies as a means of redistributing income.

4.45 We conclude that, in general, a sound case for retaining railways cannot be based on this argument.

(e) *To carry dangerous goods*

4.46 Recently public opinion has become more aware of the problem of carrying dangerous goods by road because of a particularly serious accident in Spain and a number of other incidents. Modern industry requires such goods and the volume to be carried will increase. There is no doubt that the likelihood of a severe accident is less if such goods are carried by rail, though if through collision or derailment, there is an accident, the consequences can also be very severe particularly in an urban area. CIE have argued that industrialists consigning or using such goods are relatively few, and that it should be possible to require many of them to locate where they could be rail connected.

4.47 However, a policy of sending such goods by rail cannot be the complete answer because the origins and destinations of some such goods will not be rail-connected and railways will not be accessible enough to provide a feasible method of shipment. Moreover, movements on the railway to and from railheads will often be through urban areas where the population is most at risk, and one must at least consider the possibility that a rail accident involving, for example, a batch of wagons carrying dangerous goods in the centre of Dublin could cause an explosion which would create a massive disaster. In some cases sea is likely to prove more convenient and safer than rail movement. Finally, it is probably necessary that special measures will, in any case, have to be undertaken to help protect the public from the risks they now run from dangerous consignments which must go all or part of their journey by road. Such measures may include more suitable vehicles, regular and more rigorous inspection of such vehicles, the special training of drivers and regulations restricting how and when the vehicles are driven. By comparison with such measures, retaining dangerous consignments on the railways, though sensible in appropriate circumstances, is unlikely to be a major contribution to overall public safety.

4.48 We conclude that even though in some circumstances dangerous goods can be carried more safely by rail, this would only be a sufficient policy if all origins and destinations of such goods were rail connected. As they are not, transport by rail cannot be a total solution. Even if they were rail borne, the costs of keeping railways for this purpose would be disproportionate to the advantages.

(f) *To help prevent accidents*

4.49 Road accidents are a serious problem and railways undoubtedly are safer. If the railways were to be closed down, there would be an increase in accidents because there would be more cars, buses and goods vehicles on the roads.

4.50 It is, however, important to retain a sense of proportion. While safety is an important feature of railway operation, as we have seen most passengers and freight already travel by road. The recent Committee of Inquiry into the Road Haulage Licensing System in the

United Kingdom showed that accident rates had fallen appreciably through more rigorous vehicle testing and the use of the licensing system to discipline unsafe operation (10). There are many measures which could be taken to improve the condition and driving of passenger vehicles. Again, keeping the railways open as such is unlikely to be a cost effective method of promoting safety.

4.51 We conclude therefore that the promotion of safety is unlikely to be a substantial reason for keeping the railway system.

(g) *To protect the environment*

4.52 Road vehicles cause pollution and noise. Pollution and noise can affect health. The size of heavy goods vehicles is physically intrusive. Rows of parked cars are often an eye-sore where they clutter city streets or rural beauty spots. Few would deny that countryside and cities without motor vehicles would be more beautiful, though its beauties would be enjoyed by fewer people.

4.53 The arguments on the other side almost exactly parallel those on accidents. There is so much traffic already on the roads that the railways as such make little difference to the impact of traffic on the environment. Ireland still has many roads on which there is little traffic but that is not because of the railways. In so far as the environment can be protected from traffic it is by other means, particularly by parking controls; but there is a difficult balance to be struck between preserving the environment and allowing more people to enjoy it. It is often argued that if heavy goods traffic in particular were to be transferred to rail, the environment would benefit. While there may well be cases where there would be such a benefit most origins and destinations are distant from railheads. A large part of traffic has to reach railheads by road. Typically such railheads are in the centre of cities and towns. In many cases the environmental damage done by vehicles on their way through congested urban areas to and from such railheads may be greater than that which they would cause going straight from origin to destination on more open roads. Generally, there are again more cost-effective methods of limiting the environmental impact of heavy goods vehicles, through controlling their noise and pollution, and helping keep them out of city streets, for example, by providing by-passes.

4.54 There would always be considerable environmental advantages in railways keeping siding to siding traffic, especially bulk flows; and there may well be instances where traffic now going by road could be transferred to rail with advantages. But experience elsewhere suggests that these instances are less common than is often hoped. Detailed analysis is needed to establish what would happen if the railways were closed and its traffic were shifted on to road, and then to consider the cost effectiveness of retaining rail by comparison with using money saved on the rail deficit to help improve the environment in other ways.

(h) *To conserve energy*

4.55 Another argument that has been developed in favour of the railway is the need to conserve energy. Whilst it is extremely difficult to predict these matters with any certainty it appears probable that, by the end of the century, energy sources will be less abundant and more expensive than at present. The railway is supported as an insurance policy against excessive dependence on road transport.

4.56 The case in favour of the railway on energy grounds stems partly from the fact that it is a less intensive fuel consumer than the private car or lorry, and partly from the fact that it is not solely dependent on oil, which is expected to be the energy source in particularly short supply. Looked at in aggregate terms, there can be little doubt that rail travel has the potential to consume less energy. For example, a recent OECD report on the future of European passenger transport (11) suggests fuel consumption of 72 K cal. per seat kilometre for large, fast trains (having 350 seats and cruising at 200 kilometres per hour), compared with to 212 K cal. per seat kilometre for the private car. However, the extent to which such fuel savings are realised in practice is dependent on a number of factors related to the circumstances in which the train and the competing private transport are operating. In particular, the load factors achieved and the nature of the full journey that is being undertaken, rather than the railhead to railhead part of it, are of crucial importance. On load factors, it is clear that a fully laden car can, on the figures quoted here, achieve a lower energy consumption than a lightly laden passenger train for a similar journey. The trains currently operated in Ireland travel at far slower

speeds than those considered above, and hence will achieve considerably better fuel consumption, but the figures are indicative that passenger trains will offer worthwhile savings compared with the private car when the trains are well loaded but that they may offer less energy savings compared to the private car on routes with light traffic.

4.57 The OECD reports also suggest that a 50-seat diesel bus can achieve a consumption of 71 K cal. per seat kilometre. This compares very favourably with the fast train figures, and suggests that the bus can achieve better results than the train where traffic is light.

4.58 In considering the energy consumption of road against rail, it must also be borne in mind that very few actual journeys are from railway station to railway station. The majority of trips, particularly for freight, will require road transport at both railheads, and this will clearly increase the length of journey over that by road only, and hence will increase the total energy consumed on the point-to-point journey.

4.59 Considerations such as these led the British Government to conclude in a recent White Paper on Transport Policy (12) that: "... where public transport is lightly used it often has little or no advantage over the car in saving energy". Clearly, specific analysis of actual passenger and freight flows in Ireland, and estimates of the way in which they would be handled if rail was not available, would be needed to establish the extra energy consumed as a consequence of closing CIE's railway. We indicate in an annex to this report the way in which such an analysis might be undertaken, together with some tentative figuring on possible effects. The results obtained are highly dependent on the assumptions made about the transport mode to which current rail traffic would divert if the railway were no longer available, and the load factors achieved on alternative services. But, on the basis of the values we have used, it would appear that the extra energy costs might amount to 10% of those currently incurred in rail operations.

4.60 As well as the potential advantage of the railway as an absolute conserver of energy the railways also have the potential to run on electricity, and as such are not necessarily dependent on the availability

of oil. At present the whole of the Irish rail system runs on diesel, though proposals do exist to electrify the commuter lines in Dublin. The capital costs of electrification of the whole system would be very great, as would the disruption of existing rail services while it was being undertaken. We doubt if full electrification could be justified on energy grounds alone unless the energy crisis turned out to be far more severe than at present seems probable*, though it should be borne in mind that electrification offers other benefits besides its independence from diesel fuel. In particular, it reduces maintenance costs and pollution levels and offers opportunities for more frequent services and increased traffic levels. We believe that arguments such as these must be the prime justification for investment in electrification at present. The main rationale for expecting the fuel crisis to lead to major transfers of traffic to the railways is the effect of declining oil supplies on road transport, freight and passenger. While research to provide a non-oil dependent and economical replacement for the internal combustion engine has so far proved unfruitful, much scientific ingenuity is being devoted to it, and the probability of success within the relevant timescale of the next thirty to forty years must be high.

4.61 We conclude that though there are energy savings from rail use, in the longer run the main rail contribution could only come through electrification since that could be used to reduce the dependence of the Irish economy on oil. However, the required investment for full electrification would be substantial. On energy grounds, it could only be justified if science has not managed to produce a new form of personalised transport, or car, that does not depend on fossil fuel and is economical. If such a form of transport were developed, electrification would be unlikely to prove profitable. Therefore at the least there would seem to be an argument for preserving the permanent way until the feasibility of an economical successor to the internal combustion engine is near being established one way or the other. But the case for retaining current railway operations to save energy would not appear strong.

*The argument remains unaffected by the renewed energy crisis of mid-1979 since real energy costs are not higher than they were after the crisis of the early 1970s. Rather they have risen again after a real fall.

(i) To maintain employment

4.62 Another argument for retaining the railway stems from its role as a provider of employment. In December 1978, the railway had 7,500 employees, the majority of whom would lose their jobs if the railway was closed. In addition there is the possibility of further employment contraction in firms which supply goods and services to CIE. Many of the jobs lost would be in areas outside Dublin, where the opportunities for alternative employment are poorest. Moreover, the demographic and skill composition of the workforce is such that many would find it difficult to obtain alternative employment. In an economy such as Ireland where unemployment is, and has been for many years, a serious problem such a loss of jobs clearly would not be countenanced lightly, and the fact that the Government has published a Green Paper entitled *Development for Full Employment* (5) emphasises the priority that is attached to employment creation.

4.63 In our opinion the force of this argument, whilst serious, can be exaggerated. The closure of the railway, although leading to substantial direct unemployment, would also, indirectly, be a source of employment creation in that alternative bus and road freight services would be required to convey the passengers and goods now carried by rail. This would be a significant offset to the 7,500 jobs lost.

4.64 The closure ought also to lead to an improvement in Government finances. The size of this effect depends on a number of factors, impacting both on CIE finances and directly on those of central Government. The McKinsey Report (3) conducted a partial analysis, based solely on the consequences for CIE, which showed that the costs of a phased closure exceeded the costs of rationalising and improving existing rail services. However, account was taken only of the costs of redundancy payments to railway employees and the capital costs of the railway, compared to other alternative investments in bus and road freight services. We believe that a revised analysis might now lead to different conclusions. Since the McKinsey Report was completed, railway finances have deteriorated yet further, while the inter-urban bus and road freight services are, as we show elsewhere in this report, breaking even. As such, replacement bus and road freight services for

those currently provided by rail could be instituted without recourse to Government subvention. Furthermore, staffing levels have been reduced so that the costs of redundancy payments, in real terms, should be lower, though we cannot estimate how much lower as this would depend on the timescale over which the run down of the railway was undertaken. Finally, the McKinsey analysis took no account of the impact on central Government finances. Because of extra revenues from petrol and diesel duty, arising from increased use of road services, this should have a substantial beneficial impact.

4.65 Clearly, a detailed analysis is required to evaluate all these factors fully, and the range of possible secondary effects, for example, through income tax revenues and unemployment benefit payments, is considerable. However, in the long term, it should be possible to release the railway deficit for alternative public expenditure use. This stood at £27.4 million in 1977. In principle, this money could be diverted to employment creation programmes. The Green Paper on *Development for Full Employment* (5) estimated that a five-year programme, tentatively estimated to cost £500 million would create and sustain considerable employment, rising from 7,000 jobs in 1979 to 20,000 in 1983. The closure of the railway would in the long term save some £135 million over a five-year period, which is clearly material in relation to the size and cost of employment creation programmes currently proposed.

4.66 As well as the points raised above, there is one other factor which should be considered when assessing the social case for the railway, the extent of possible support for it. As in many other countries railways attract to themselves a sizeable fund of public goodwill and affection as well as the devotion of a minority. Part of this may reflect a widespread impression that the railways are a more cost-effective form of transport and have stronger social and environmental arguments in their favour than is actually the case. But much of the feeling is more emotional and nostalgic. Nevertheless, one may wonder how far most Irish people would really wish to persist in making their contribution through taxes to maintaining the railways at current levels of deficit. This should be a matter for public debate.

The need for the railways

4.67 In the preceding paragraphs we have discussed the financial position of the railway system and the main social arguments for retaining the system. Reluctantly we feel that we have no alternative but to question whether in Ireland there is a suitable long-term role for the railways, or whether it would be better to plan for their eventual closure. Their commercial position has been poor for many years and has deteriorated sharply since 1970. We doubt that there are very substantial savings to be made by cutting services or that profitability could be restored by investment. In saying this we stressed the particular drawback that in our judgement a railway faces in a country of short distances, dispersed population and low density. Elsewhere in the world freight railways, but seldom passenger railways, are capable of being run profitably, but that depends very substantially on there being high volumes of very long distance freight traffic which is physically impossible in Ireland. By contrast the geography of Ireland is such as to put it among countries least suited for commercial railway operation and therefore one in which even an efficient operation will incur very sizeable deficits. The arguments for retaining a railway must be social. The question must be therefore how far the social considerations discussed above justify the heavy financial costs.

4.68 It would be wrong for any decision to be taken without more detailed examination of the opportunities for cost savings and the options which are open than we have been able to give. In the ultimate analysis, the value to be placed on the railway's social benefits are for the Government and people of Ireland to assess rather than ourselves. Furthermore, we would not wish to preclude the possibility of retaining certain sections of the present railway, for example the Dublin to Cork line or the suburban commuter network in Dublin, on either economic or social grounds. But we are convinced that there is a *prima facie* case for fuller investigation of the merits of closing all or most of the rail system, and in the process abandoning the policy of having a national rail system. We explore below the approach which might be adopted in undertaking such an investigation.

4.69 We recommend that the Government in conjunction with CIE should carry out a major review of the prospects for the railway

industry. As a part of this exercise, CIE should be asked to prepare three or four alternative long-term rail development strategies. The first should be based on the assumption that the total funds available to the railway for investment and operating subsidies would be progressively reduced to say two-thirds of their present level. This would inevitably lead to substantial reductions in service and might lead to the eventual abandonment of the whole system. The second alternative would be based on the assumption that the funds available to the rail system for investment and operating subsidies remained close to their present level. The third and fourth development strategies would be designed to test the implications for the railway of making a higher level of funds available. In all cases the railways would be asked to prepare a ten-year development plan showing how they would use these funds, and the impact of the proposed funds on the level of service provided and the likely financial position of the railways. They would also be asked to give a broad outline of the requirements for further finance over the following ten years which would be needed to maintain services at the level established.

4.70 We understand that CIE are at work on longer term plans for the railway, and would welcome a Government initiative to endorse their plans. We believe it is essential that Government should be involved in such planning exercises from an early stage, to ensure that development options which it wishes to see considered are included in the analysis from an early stage, and that information is presented in the format it requires. This is essential before the Government can take an informed decision on the long-term future of the railway system.

4.71 There is no doubt that a planned run-down of the railways, followed by their eventual closure, could be justified commercially. Any decision to retain the railway must therefore rest on the Government's assessment of the social and political costs of closure, allowing for the economic inefficiency that results from its retention. If the Government does decide, following the proposed review, that the railway should be retained, then a clear framework should be established within which CIE can operate the railway with a reasonable degree of certainty as to the Government's medium term objectives.

Development of policy guidelines

4.72 The further investigation of the railways should be followed by a clear policy decision on the future of the railway, the social role it is to perform and on how it is to be judged successful in performing such a role. We do not believe that the Government, especially the Department of Tourism and Transport, has responded at all adequately to the railway's changing situation over the past decade. In 1968 the rail deficit was under a third of receipts. Since 1976 it has exceeded receipts. The extent to which the deficit needs to be justified by social considerations has therefore increased accordingly. In our view, it is for Government to evaluate these social considerations, and state how much it is prepared to pay to see them met. At present, there is far too great a willingness to leave it to CIE to decide its own role. The relevant legislation in successive Transport Acts is not at all specific in defining what CIE's obligations are, but this is the nature of legislation. With imprecise legal responsibilities clear guidance from Government is essential. It has not been received.

4.73 There was little public response to the McKinsey Report (3), apart from a brief endorsement in 1974, some three years after publication, and none whatever to the successive reports for the National Prices Commission (8 and 9). The Government has publicly neither endorsed nor rejected CIE's financial target for the railway despite obvious opportunities to do so in the Green Paper on *Development for Full Employment* (5) or the White Paper on National Development 1977-1980 (3), both of which comment on CIE's finances. The Green Paper argues that: "cost reductions are necessary if the deficit on railway operations is to be contained within tolerable bounds". The White Paper states: "There has been a serious increase in recent years in the losses incurred by Córas Iompair Éireann. Every effort is being made to improve productivity and efficiency in CIE with a view to reducing these losses." This hardly constitutes clear guidance.

4.74 On the operational side, the Government has committed itself to the retention of the railway from time to time. For example, when the Government responded to the McKinsey Report (3), in 1974, it stated that: "The Government has decided that the railway system should

continue to be preserved subject to further concentration and reorganisation in accordance with the general concepts outlined in the McKinsey Report, as developed in the further studies made by CIE, and has approved in principle, additional capital investment to enable CIE to implement their proposals." Similarly, in the latest White Paper *Programme for National Development 1978-1981* (14) it is stated that: "The Government recognise the necessity of maintaining an efficient mainline railway network" and "the Government propose to maintain the Dublin commuter rail services". However, such statements are highly generalised, and the burden of interpretation is placed on CIE.

4.75 The one area in which there are regular discussions between CIE and Government is on the question of subvention levels. A figure is always agreed for the year ahead, and performance is assessed against prediction through monthly monitoring returns to the Department of Tourism and Transport and, through them, to the Department of Finance. The general Government approach in such negotiations is to endeavour to set a challenging target for CIE. In practice, the target in recent years has invariably proved too challenging, and losses have exceeded the approved subvention level. However, Government meets these full losses which are paid as grants under the conditions imposed by EEC regulations.

4.76 We do not consider this procedure satisfactory on either side. CIE are confronted with a target which they know they have little hope of meeting, and indeed are not really expected to meet since the target is more an aspiration than a realistic estimate of prospective losses. Such a situation is bound to have an adverse impact on management morale within CIE. On the other hand, the Government is placed in a situation where, on established precedents, it is bound to grant aid for all CIE losses, whether within the originally agreed limit or well outside it. Effectively, CIE are assured of starting afresh with a clean slate every year. These problems are exacerbated by the fact that no attempt is made to look further than one financial year ahead. Levels of support over a longer period are not agreed, even tentatively. This creates obvious difficulties for any medium-term policies CIE might wish to adopt to reduce losses, since they have no medium-term financial target to aim for unless they impose it on themselves.

4.77 We believe that a different administrative framework is required, to ensure that Government does take the necessary policy decisions about the social value of the railways in relation to the service provided. We believe that the Government should in the light of the proposed review advise CIE publicly on four points:

- (a) how much of the existing rail network is required to be retained for social reasons;
- (b) what is the minimum standard of passenger service required in terms of frequency and speed;
- (c) which specific bulk freight movements should the railway be expected to handle, and what should be its competitive policy towards other freight traffic;
- (d) how much the Government is willing to pay CIE to continue to provide these services.

This does not of course mean that the Government should get involved in detailed operational activities of the railway such as timetabling. The Government should, however, give a broad indication of what it expects the railway to provide for its money.

4.78 On the first point, we would again draw attention to the fact that the present network is almost exclusively a radial one connecting Dublin to the other major urban centres. Elimination of any one of these radial routes would mean the system ceased to be a national one at all. Thus, if the Government requires a national railway, there is little scope for further reductions.

4.79 The Minimum standard of passenger service and the freight policy would be determined by the Government after discussions with CIE of the cost implications of alternative policies. The railway should of course at all times be free to augment services above the minimum level if this can be shown to be financially profitable.

4.80 CIE's minimum obligations in the freight field should, we feel, be restricted to two main areas. There are certain identified bulk traffics which should be restricted to rail at a fair price to be agreed between the Government, CIE and the industries concerned. Apart from this, CIE should be free to compete freely for other traffic, accepting only that

required to provide a nationwide parcels and sundries service since we doubt if this could be left to private enterprise. This service has recently been reorganised to cut costs, and provides an essential social service throughout Ireland. CIE should, however, continue to have complete freedom to use either road or rail transport or a combination of both for this purpose.

4.81 It is clearly necessary for the Government to indicate to CIE the level of funds it is prepared to devote to enable CIE to provide the social service required. The review of future financial support would be separate from existing arrangements for negotiating the annual subvention, although there would obviously be close interactions between the two. The principal features would be that an indication of the resources to be made available for subventing the railway would be provided for a period of years ahead, with adjustments for inflation as time went by. In essence, this need be no different from the approach which CIE has adopted for itself in endeavouring to maintain the rail deficit constant at 1975 levels in real terms.

4.82 CIE would have the duty to maintain services within the specified level or to indicate to the Government well in advance if this was not likely to prove possible. In the latter case, the Government would have to decide whether it wished to increase its support, ask CIE to reduce the level of service provided, or whether it can persuade or coerce CIE into developing revised plans which would enable the required level of service to be provided within the agreed budget.

4.83 Clearly, there are many details which would require settling through discussions between CIE, the Department of Tourism and Transport, the Department of Finance and other interested parties. Special arrangements may well be necessary for dealing with the railway's role in urban transport, particularly in Dublin, which we discuss further in Chapter 9. But the central purpose would be to give CIE a workable remit within which it could plan ahead with reasonable certainty about the future working environment. For this reason, it would be desirable to make it clear that commitments once entered into would so far as possible hold good for a period of, say, five years.

a thorough review such as we are proposing. We have therefore considered what ongoing relationship between the railway and the Government is needed to ensure that Government continues to take the proper social decisions and CIE the correct operational and commercial ones. We believe this can best be covered by the submission of an annual corporate plan by CIE to the Government. CIE submitted a confidential business plan to the Government in 1976, which it is currently revising. We consider that this plan should become a regular annual submission which would cover a period of about five years and would deal with such items as any amendments that CIE proposed to its social remit, investment intentions, planned developments in operational and charging policy and the progress which CIE had made in meeting the objectives set out in earlier plans. A summary of the plan would be published.

4.85 Government would be involved in discussions leading up to this plan, as it was with the 1976 business plan. It would also be required to approve the plan, subject to any reservations it might have. As part of the approval process, the Department would sanction CIE's planned investment for the following year. It would be unrealistic to give formal approval for investment any further ahead than this, but CIE would at least receive an indication of the acceptability or otherwise of what it proposed for later years. The Government would also give formal approval of the level of grant payment for the next year.

4.86 The payment arrangements for the agreed level of grant should be such that CIE received the money as an above the line sum in its accounts, so that it is counted with the revenue from rates and fares when compiling the railway working account. This is the procedure now adopted by the British Government, for British Rail, by the French Government, for SNCF and by other EEC Governments in dealing with their respective railway administrations. Though this approach is not required by EEC directives it is very much in the spirit of them, by recognising that the subvention payment is a payment for services rendered, i.e., a public service obligation. After receipt of the agreed level of grant, CIE would aim to break even on its rail operations. Life is uncertain, and inevitably the railway might make profits or losses after

account was taken of the grant. But, in either case, these would not be deducted from, or added to, the agreed level of the grant. If a loss was made one year, then a profit would be required the year after; if a profit was made then this would provide a reserve for other years.

4.87 It has been put to us that an alternative financial method of safeguarding the railway's future would be to provide future capital requirements interest free, or to write off existing debts. We could not recommend such a course. Although investment would be costless to CIE, it would not be costless to the community as a whole. Thus the Government would be giving a concealed grant, which we regard as less satisfactory than an open and publicly acknowledged one.

4.88 The appraisal of planned investment will be of particular importance within the new framework we propose. At present, CIE are prepared to make investments for social reasons where there is no hope of commercial viability. Under these new arrangements, the Government would have responsibility for specifying CIE's social remit, and for financing it. Thereafter, CIE would be expected to operate on a commercial basis. We therefore consider that investment proposals of over £500,000 should be explicitly identified in CIE's corporate plan, with appropriate justifications. The extent of the justification required would increase with the size of the investment.

4.89 In our view, rail investments fall into three categories:

- (a) commercial investments, designed to reduce the costs of and/or increase the demand for existing services. The recent mechanisation of sundry freight carriage is an example;
- (b) replacement investment which enables CIE to continue to carry out its existing social service remit. Many proposals for new rolling stock or the renewal of lines will fall into this category;
- (c) investments which are not commercially viable, but which will improve the service CIE provides. Electrification proposals on the suburban line from Howth to Bray, and the prospective Dublin Rapid Transit System probably fall into this category.

4.90 The railway would be expected to indicate under which heading they wished the investment to be considered. The prime responsibility for undertaking investment of category (a) should remain with the railway as the commercial operator. Provided the investment could be financed within the investment ceiling, the proposal should normally be approved.

4.91 Investment which is primarily replacement (category (b)) is likely to give rise to depreciation and interest burdens well in excess of those currently charged in the railway working account. The Government will have to decide whether it is willing to see services withdrawn, or whether it would be willing to pay an increased grant. Category (c) investments are broadly similar to those in category (b) in that Government must decide if their provision justifies extra grant.

4.92 In presenting investments in categories (b) and (c) to Government, CIE must spell out both the commercial and social consequences separately. In our view this would be wholly desirable. There has been too great a willingness, in both CIE and Government to argue that because continued provision of rail services is not based on a commercial decision, then there is no need to examine investment proposals on a commercial basis either. We believe this logic to be false, in that, even if non-commercial investments are made, it is of vital importance to be aware of the commercial consequences when deciding if they are worthwhile or not. While we would expect CIE to state what it estimates to be the social and commercial case for investment, it is for central Government to evaluate and decide on that case.

4.93 It should not be thought that these proposals are meant to make life easy for the railway, with a guaranteed subvention which can be increased at will by reference to further social investments. On many occasions the Government will have to say no, and inform CIE that the investment must be financed through higher charges or cannot be proceeded with at all. At times, the constraints on public expenditure may be such that the level of grant has to be reduced. But it is necessary to ensure that investments which have no hope of

commercial success can at least be considered, particularly where the alternative is to withdraw services which the Government has already expressed its wish to retain.

4.94 The final element of the relationship between CIE and Government that needs to be considered is regular monitoring. CIE already provides the Department of Tourism and Transport with a monthly return on its capital expenditure and subvention requirements. We believe that such arrangements are essential and should, if possible, be developed to ensure that CIE meets the objectives set out in its plans, as approved by Government. In particular, the Government will need to take a close interest in any situation where CIE is making losses over and above the level of the approved grant.

4.95 We believe that the arrangements proposed above, by defining more closely the responsibilities of CIE and of the Government, would help to make the railway more efficient. Management would still need to be conscious of the social role of the railway, particularly when putting forward investment proposals. But a far greater part of their effort would be devoted to trying to improve the railway's commercial position. At present, and for the foreseeable future, there is no hope of making the railway pay its way, and, as such, the railway has no commercial objectives to aim at in the medium term unless it be a self imposed one. A requirement to break even after the payment of a grant which was known for a period of years in advance with reasonable certainty would, we feel, be a considerable spur to efficiency.

CHAPTER 5

INTER-URBAN AND RURAL BUS SERVICES

5.1 The majority of the inter-urban and rural bus services is operated by CIE. CIE's inter-urban bus services are operated so as to complement, rather than compete with, their rail services. The services are of two types:

- (a) those on routes also served by the railway. They are generally slow, and are operated as feeders to the railway from destinations without rail stations. However, express services are also operated on rail routes at times when the flow of traffic would be insufficient to justify a train;
- (b) those on routes where the railway does not operate. They are on timetables intended to be co-ordinated with those of the railway wherever they serve railway stations. A recent development has been Expressway, which offers reasonably fast services between larger urban centres not connected by rail, for example, from Ballina to Limerick and Cork.

A number of private bus operators also provide services, under licence from the Department of Tourism and Transport, on routes which are not served by CIE.

5.2 CIE's inter-urban bus services are not established as a separate accounting entity; their accounts are amalgamated with those of urban bus services outside Dublin (e.g. in Cork and Limerick) and of school buses. However, the inter-urban services account for about 70% of total provincial bus receipts. Overall, CIE's provincial bus services

operated profitably until 1974 but, since then, as Table 15 shows, they have made losses. CIE have advised us that the losses are incurred by the urban services.

TABLE 15
Finances of CIE Provincial Bus Services 1968-1978
(Cover Inter-Urban Services, Urban Services Outside Dublin and School Buses)

Year 31st March	Total Expenditure (£000)	Surplus/(Deficit) (£000)	Surplus/(Deficit) as % of Expenditure
1968	4,439	415	9.3
1969	4,286	637	14.9
1970	4,928	633	12.8
1971	5,984	336	5.6
1972	7,033	550	7.8
1973	8,158	319	3.9
1974	9,746	289	3.0
Nine months ending 31st December 1974	8,697	(94)	(1.1)
Year ending 31st December			
1975	14,465	(847)	(5.9)
1976	17,760	(1,175)	(6.6)
1977	20,089	(510)	(2.5)
1978	23,860	(1,251)	(5.2)

Note: 1978 figures are subject to audit.

Source: CIE Accounts.

5.3 Government counter-inflation policy, and the creation and activities of the National Prices Commission, have been significant factors in causing these recent deficits; prices have been restrained, and explicit Government subsidies were given to reduce bus fares in 1975. Even so the services have never gone deeply into the red and CIE do not intend that they should. In aggregate it should, in our view, be possible to raise fares to break even on these services without substantial losses of traffic. However, this would almost certainly require cross

subsidisation with profits from the longer distance routes covering losses on the urban services in Cork, Limerick, Waterford and Galway. We discuss the desirability of such cross subsidisation below. Operators of bus services in the private sector do not receive any subsidy, and hence it can be assumed that taking one year with another they make a profit or at least break even.

5.4 One of the most important points to note from these figures is that they suggest that if any rail passenger services were to be closed down, replacement bus services could probably be provided without the need for any Government subvention. When rail services have been withdrawn in the past, replacement bus services have been instituted, though CIE have generally found them unprofitable. The major reason for this would seem to be that rail services have not been withdrawn until traffic volumes had fallen to a level insufficient to support a bus service. Clearly, if levels of traffic were low enough in any future rail closures, a similar problem could arise. But the railway is now operating only on the most heavily trafficked routes, which is precisely where buses would have the best prospects of operating profitably. Moreover, even if there were losses, they would certainly not be on the same scale as those incurred by the railway; buses are clearly a cheaper method of providing basic public transport services.

5.5 In general we have no reason to suppose that inter-urban buses raise any major transport policy issues. However, two matters do merit some further consideration. Firstly, we regard the development of Expressway as wholly desirable and commendable. With a better road network (see Chapter 6) it should be possible to extend and improve this service still further. Provided the bus service can be operated profitably, and notwithstanding any possible impact on railway finances, we consider that such a service should be generally available on routes that parallel the railway, rather than merely at times when traffic levels are insufficient to justify a train.

5.6 Secondly, the Government ought to consider further its attitude towards the subsidisation of rural bus services. It has been put to us strongly that where needed it ought to be possible for operators to provide bus services throughout Ireland without a subsidy. If this is so,

then advantage should be taken of the fact since the presence of subsidy inevitably complicates relationships between the operator and Government and implies considerable vigilance by both if financial discipline is not to be eroded. However, experience in other countries suggests that rising car ownership makes it progressively more difficult to provide an adequate subsidised service to the substantial minority for whom a car is not available especially in remote rural areas. We have been told that in many, perhaps in all, such areas in Ireland there is a strong sense of community which leads many of those with cars to help those without. Such a spirit is obviously to be encouraged and if it can avoid the need for subsidised public transport so much the better. Nevertheless, one should not rule out the need for subsidy eventually. At present, as we discussed above, CIE break even on their provincial bus services once the urban services are excluded. However, CIE have advised that, while the long distance Expressway services are profitable, losses are made on the village routes. There is therefore an element of cross subsidisation, as is invariably the case with this system. There are losses on some routes which are covered by profits on others. We would suggest that, where a bus service is being operated for social service reasons, the decision to subsidise it is one for Government to take rather than CIE. As a consequence, the finance to subsidise it should come from Government, rather than from profits on other bus routes, which mean higher fares on them than would otherwise be necessary and therefore lower traffic.

5.7 This is not only an issue of equity. In the short run cross-subsidisation tends to prove attractive to both operators and Governments. The former are ready to accept it if given monopoly rights over their routes and prefer it to more direct subsidies which they feel would jeopardise their independence. Government prefer it because they do not become accountable for expenditure on a route-by-route basis. But in the long run, cross-subsidisation has a severe effect on the health of public transport. As ridership declines, which may well happen on routes in remote rural areas as incomes rise and more cars are bought, bus fares must be raised still further on the more profitable routes to meet the losses on the loss-makers, so discouraging use of the more profitable routes. This can lead to a greater erosion of the bus services than is necessary or desirable. We would argue that

sooner rather than later is the time to grasp the nettle and establish the machinery for subsidising unprofitable bus services on a zonal, or county, if not on a route basis.

5.8 In large part this echoes our earlier observations on the relationship we would advise between CIE and Government in operating the railway. As for the railways, the amount to be made available for subsidies, both in the aggregate and for individual services, must depend on the Government's assessment of the social benefits arising from providing the bus services. Ultimately, this is a political decision. However, the issues raised here are less difficult than with the railway, since the losses are both smaller, and more easily identified with individual routes. We consider that CIE should, using the data it now has on route costs and revenues, indicate to Government those routes which are losing money. It would then be for Government to decide whether it wished to pay a subsidy for such services, or whether it preferred to see them closed down.

5.9 In principle, the subsidy payable on each route would be the difference between the full cost of running that service and the revenue earned on it. However, for an organisation as large as CIE, the procedures required to determine the subsidies on a route-by-route basis would be cumbersome. One possible way of simplifying matters would be to apply the yardstick currently employed in negotiations between the Greater London Council and London Transport, whereby London Transport undertakes to provide the maximum possible passenger mileage for a given level of subvention. Discussion then concentrates on what additional services could be provided, or what services would have to be withdrawn, for marginal increases or decreases in the subvention.

5.10 Other criteria for determining subvention levels could be devised, and might be more appropriate to the Irish situation. But in all cases, the underlying principle should be that the Government, which is providing the finance, should decide which services are to be supported. We would also recommend that the Government and CIE agree on an appropriate level of subvention in advance of the period to

which it applies. This helps to avoid the dangers inherent in a situation where negotiations of subsidy take place through an arm's length relationship in which the subsidised agency presents Government with its estimate of the net cost of the service without Government having the opportunity to check these costs. The relationship between Government and the operator should be as far as possible a commercial one in respect of the services which it is using public funds to help the community buy. It must therefore negotiate the quality of these services, evaluate the efficiency with which they are provided and be able to scrutinise the costs as any buyer in a large-scale industry will scrutinise the costs of a major supplier.

5.11 In determining the extent of support that it is willing to provide, we consider the Government should develop a specific policy for the provision of public transport services in rural areas, where the density of traffic is not sufficient to cover the costs of providing regular scheduled bus services. Ideally, we would argue that a minimum standard of public transport should be available to all, or at least to all communities of more than a specified population (perhaps 100 people might be a realistic minimum). In practice the provision of such services may prove very expensive, and may be becoming less necessary as private car ownership develops in rural areas. Rather than attempt to provide expensive and probably little used conventional bus services it may be better to adapt and build on other transport already available in the area.

5.12 We would suggest that there are three possibilities which should be considered. The first is to make greater use of the school buses. At present CIE is responsible to the Department of Education for providing this transport. The service is provided using both scheduled and special vehicles operated by both CIE and private operators. A variety of different vehicles including full size buses, minibuses and taxis are used for this purpose as appropriate. There are, however, a large number of buses which are restricted solely for school use. In many cases it might be possible at low cost to utilise these vehicles for other public transport services when not required to transport children to and from school.

5.13 A second alternative would be to examine the possibility of combining mail collection and delivery with the provision of a basic public transport service by permitting the carriage of passengers in vehicles operated for postal services. A number of such services, known as post buses, are operating in the more sparsely populated areas of the United Kingdom and appear to satisfy a definite public need. The dispersed pattern of many Irish rural communities may, however, make such services less satisfactory than in the United Kingdom where the rural population is generally more clustered into well defined villages.

5.14 The third possibility that should be examined is the development of self-help schemes whereby the local people in a particular area are encouraged to provide their own service. In so far as voluntary help can be relied on without financial aid from Government so much the better. But there are situations in which Government administrative assistance may be required to channel voluntary help to where it is needed. At present, a number of interesting experiments are being carried out in rural parts of England whereby scheduled minibus operations are provided by a rota of volunteer drivers. Another alternative would be to encourage regular car pools whereby different car owners agree to let their car be used perhaps once a fortnight to provide a service to the nearest market town or for hospital visiting. Government could provide particular encouragement here by permitting car owners to charge fares to members of the pool. In many cases, those unable to drive but able to pay would feel less under an obligation and more inclined to seek help from others, if this were allowed. A limited amount of financial and administrative support to such schemes as these, provided through the local authorities, the local police or the health service could, we feel, often prove a lot cheaper than continuing to operate unremunerative conventional services. It may also prove beneficial in helping to prevent the further depopulation of remoter areas.

5.15 The potential for private bus operators to provide rural transport should also be examined. One of the arguments used against allowing private operators is that they will cream off the best of CIE's traffic thereby leaving CIE with loss-making routes. However, we believe this risk can be guarded against by permitting competitive bidding for route

licences from time to time, in which prospective operators, including CIE, would specify the service they were prepared to provide. As it would be difficult to justify investment in buses if licences could be revoked at frequent intervals, we believe such route licences should have a life of about five years, after which they would be open to bidding again. This procedure could be particularly valuable on the rural routes that CIE find unprofitable. In a number of cases private operators may be able to provide a more flexible lower cost service than CIE by using drivers who work on a part-time basis, or owner operators who combine driving, vehicle maintenance and other administrative activities. The locally based private operator may also be in a good position to use the same vehicle to combine scheduled services, school services and special private hire work therefore effectively serving all the needs of the local community. As a result, he may be able to service the route with a lower subsidy than CIE would require, or even as we have suggested earlier with no subsidy at all.

CHAPTER 6

ROADS

6.1 Ireland is a sparsely populated country; its population density is the lowest in the EEC. As such, the provision of the road network presents special problems because so much road is needed to ensure that everybody has access to the network. Thus McIlraith (1) has drawn attention to the fact that England, with 15 times as many vehicles as Ireland, has only 10% more mileage of public road. The density of the network in the two countries, in terms of road mileage per square mile, is similar. Inevitably, the degree of utilisation made of the road network varies. Traffic is sparse in some remote rural areas, but much of the national primary network, constituting 3% of the road system, is heavily used, and, An Foras Forbartha estimates, carries 25% of the total traffic.

6.2 There are, therefore, conflicting calls on the public expenditure available for the road system, between the maintenance of an extensive national network of minor roads, and the improvements of major links where demand is concentrated. In recent years constant levels of spending on roads coupled with rising traffic levels have made this inherent conflict increasingly acute. Expenditure on roads, in real terms, has risen very little since the mid-1960s and the percentage of GNP devoted to the road system fell from 1.5% in 1966 to 1.1% in 1976. In Britain, and many other countries, there were boom periods for highway investment in the late 1960s but these have not been experienced in Ireland. Even now, after sharp reductions in spending, roads expenditure accounts for about 1.5% of GNP in Britain, which is higher than the Irish proportion. While no magic attaches to any particular figure, and there is no sense in one country raising its percentage level because other countries have, it does suggest that in the recent past Ireland has given roads low priority.

6.3 In recent years, Government policy, within the constrained total expenditure, has been to concentrate resources on maintenance. In the mid-1960s roughly half of total expenditure was on improvement; this figure has now fallen to less than a third, and improvement expenditure levels have fallen not merely as a share of GNP but also in real terms. However, Government is now considering allocating more resources to the improvement of the primary routes. The recent Green Paper, *Development for Full Employment* (5) drew attention to proposals from local authorities and other interested bodies which would cost many hundreds of millions of pounds to put into effect. It suggested that double the present level of spending on road improvement could be put to good use by 1980, and there has already been an expenditure increase, in real terms, of 20% between 1976 and 1977. Even this may not be enough to satisfy the Confederation of Irish Industry which, in its comments on the Green Paper (15), called for road investment four times the present level.

6.4 As part of present deliberations on future road policy, the Government is engaged in the preparation of a Road Development Plan,* referred to briefly in Chapter 3. It is already known from the Green Paper that the plan will give priority to the access routes to Dublin and to the major inter-urban roads, and that major bridges and relief roads for which need has already been established in earlier studies will also be considered. Any additional funds are likely to be spent on these major schemes rather than on smaller projects or on increased maintenance of the existing system.

6.5 While the Irish Government still has to reconcile these proposals for higher spending with other conflicting calls on public expenditure it does seem likely that more money will be spent on roads over the next few years. The increased resources will be devoted to the improvement of the primary network. Given the published information, increased spending seems to be justified, and we believe it is right that the primary network should have priority, although the evidence available to us is incomplete.

*Since this was written, the *Road Development Plan for the 1980s* (Pri. 7967) was published (on 4 May 1979).

6.6 The volume of traffic has increased substantially. Though the increase cannot be quantified precisely, the figures presented in Chapter 2 on vehicle ownership and fuel use suggest that there is now 70% more traffic using Ireland's roads than there was ten years ago. This rate of increase is forecasted to continue. Although car ownership levels have risen sharply, they are still low by the standards of North America or the remainder of the EEC.

6.7 Average travel speeds, even on the primary road network, are slow, particularly for goods vehicles. The Confederation of Irish Industry has suggested (15), based on evidence from An Foras Forbartha, and from a survey undertaken by the Confederation, that average speeds for lorries are only about 25 mph. Union representatives have confirmed that this is a realistic estimate. By contrast, average speeds elsewhere in the EEC are about 40 mph, though the figures are not strictly comparable as other countries have higher speed limits. Cars travel rather faster averaging about 40 mph on the inter-urban network, but this is also slow by international standards. Ireland is both poorer and more sparsely populated than other EEC countries, and, for both these reasons, one would not expect the road network to be as good. However, such low speeds indicate the presence of major bottlenecks, either in towns that lack by-passes or on inadequate inter-urban roads, and significant time savings could be achieved by road improvements. This will be of increasing importance with EEC regulations reducing the permitted working hours for lorry drivers.

6.8 Work by Barrett (16) has applied British cost benefit appraisal techniques to proposed improvements in the Irish road network. He found that an investment of £219 million at 1970 prices, equivalent to about £500 million at 1978 prices, would earn a rate of return of 21%. While some of the schemes included in that assessment have now been built, there are several reasons for suggesting that £500 million at 1978 prices would be a minimum estimate of the backlog of potentially worthwhile road schemes. Investment on this scale would not bring the network up to such a high standard that further improvement would be without additional benefits. Barrett estimated that an extra £97 million at 1970 prices, equivalent to well over £200 million today, would yield a return of 7%. While we feel more confident about recommending an

investment earning 21% than one earning 7%, there are almost certainly schemes in this latter group that would earn a worthwhile return, since the approach in the paper is to look at schemes in blocks rather than individually. Though it can equally well be argued that there are schemes in the first group earning rates of return of well under 21%, it should be borne in mind that traffic levels have continued to rise steadily since the analysis was undertaken. This almost invariably causes the return on individual schemes to rise. Furthermore, the appraisal includes no allowance for the benefits of employment generation arising from the investment, which are of particular importance at the present time. We are therefore convinced that greater road investment, at least at the levels posited in the Green Paper, would be justified.

6.9 We are less certain that it is realistic to endeavour to achieve this expenditure level by 1980. There is a significant risk of bidding up road-building costs because of supply shortages in this part of the construction sector. When public sector construction expenditure in Britain was increased sharply in the early 1970s, it led to both price rises and supply shortages, particularly of specialised manpower, in spite of high unemployment levels. In Ireland, the acceleration of the housing programme over the last two years has led to similar problems. We recommend that increased spending levels should be accompanied by a close monitoring of prices to ensure that they are not moving up at an unreasonably fast rate compared to other parts of the construction sector or the economy generally.

6.10 We also feel that the availability of more funds for highway investment ought to be accompanied by a more systematic appraisal of the routes on which the money is to be spent. In part this mirrors comments we have made earlier about the evaluation of investment in railways. But the need for improved appraisal methods is probably even more urgent in the case of roads expenditure. Double the spending will mean twice as many opportunities for mistaken investment.

6.11 The responsibility for settling priorities lies with the authority which is financing the expenditure. This means the Department of the Environment for national roads, and the road authorities (County Coun-

cils, County Borough Corporations, Borough Corporations and Urban District Councils) for county and urban roads. Although road authorities receive grants for county and urban roads from the Department, they are block grants and the authorities have freedom of choice in settling which schemes the money should be spent on.

6.12 We are less concerned about expenditure by road authorities, where schemes are generally fairly small, and sophisticated assessment techniques could not be cost effective. Improved selection and evaluation procedures for national roads are, however, needed. At present, the Department has two sources of information on potential national road schemes. The first is the *Road Needs Study*, conducted by An Foras Forbartha, which covers all inter-urban roads. The second is the transportation studies conducted for urban areas which contain recommendations for national road schemes serving the area.

6.13 The *Road Needs Study* was a confidential document, commissioned by the Department in 1974, and updated in 1978. We have been permitted access to it. In its detail, this exercise was fairly complex, but in very basic terms, it can be broken down into a forecasting stage and an evaluation stage. The forecasting stage involved the estimation of likely traffic levels along major routes and corridors over a twenty-year time period, based on likely trends in population, car ownership, and vehicle usage. On the basis of these expected flows, standards for each link in the road network can be determined by setting a particular standard of road for a particular level of flow. Three options were considered, which embodied differing design standards, but no effort was made to choose which was the appropriate one, this being regarded as a matter for central Government to settle in the light of the likely availability of resources.

6.14 The Government has never felt it necessary to define the desired standard of service but has proceeded from year to year on an *ad hoc* basis. Account has been taken of the study and of factors such as the accident record of particular stretches of the network. But no detailed quantified appraisal has been undertaken to determine the standard of road that should be built in a given location or the priority which particular schemes should have in the programme.

6.15 We consider that certain factors should be quantified in a detailed appraisal. In particular for any scheme, estimates should be made of:—

- (a) the time savings to vehicle users;
- (b) changes in total vehicle operating costs;
- (c) changes in accident rates.

Conventional techniques for undertaking such studies, and summarising the results in the form of a cost benefit study are now well established in a number of countries. The procedures need not be expensive; we do not believe that synthetic traffic modelling techniques are necessary or even desirable for the inter-urban network in a country such as Ireland. Nor would they entirely supplant political and administrative judgment in setting programme priorities; no appraisal can be so all encompassing as to take account of all possible influences.

6.16 We believe that there are three main reasons why cost benefit analyses should be applied to road schemes:—

- (a) At a very aggregate level they may help to determine the overall size of the roads programme;
- (b) they may help determine which schemes should be built with the inevitably limited available budget; and
- (c) they may help decide more detailed aspects of road geometry, once the need for a scheme has been established.

6.17 The role of cost benefit analysis in determining the appropriate size of the roads programme as a whole is limited. It can be of use in determining whether or not road schemes are, of themselves, offering good value for money, as indeed we have used it in paragraph 6.8 of this report. However, it cannot show whether roads expenditure offers better value for money than other areas of public expenditure, for example, housing or water and sewerage. Realistic techniques for comparing investment in these sectors with road spending simply do not exist and priorities cannot ultimately be resolved at anything other than the highest levels of Government. Cost benefit techniques may,

however, help indicate whether or not there is a *prima facie* case for considering additional road investment or whether the expected return is too low to justify the use of scarce Government funds.

6.18 We also consider that cost benefit analysis can be a useful technique for determining priority schemes from a limited roads budget, although it cannot be the sole criterion. Road schemes are designed to achieve multiple objectives, some of which, such as time and accident savings, can be incorporated in a cost benefit study and some of which, such as effects on the environment and on regional development, cannot so readily be incorporated. Thus a scheme in the West of Ireland which would support industrial development could understandably be preferred to a scheme in the area around Dublin even though it showed up less well in a cost-benefit assessment. However, in our view, it is false logic to argue that because it is not possible to place a monetary value on all costs and benefits, therefore it is not worthwhile to place a monetary value on any of them. Time savings are an item which can be quantified fairly readily, and placed on a consistent basis for all road schemes, and we believe a more rational choice between projects will occur where information that can be placed on a consistent basis is estimated on that basis than when it is not. Such consistency is also desirable from the viewpoint of public accountability, for example in demonstrating the validity of the Department's case at public enquiries.

6.19 Finally, we consider that cost benefit techniques can be of considerable value in determining the more detailed aspects of scheme design. Before a scheme is finally built, it is frequently necessary to choose between numerous possible alignments and standards of construction in terms, for example, of whether to build single or dual carriageways and which intersections, if any, should have grade separated junctions. The implications of these decisions for regional development or for the environment are frequently small, but in terms of the quantifiable costs and benefits offered by the scheme, the differences can be substantial. This point is well illustrated for the United Kingdom by Chapter 15 of the Report of the Leitch Committee (17), which shows a comparative evaluation of 20 different designs for a single by-pass alignment. The scheme eventually chosen costs £2.1

million, from a selection of proposals costing from £1.5 million to £2.6 million and offering rates of return which were, in some cases, as much as 3% below that of the option selected. The case for the chosen design solution would not have been at all apparent in the absence of standard and simple cost benefit techniques for comparing options.

6.20 However, improved evaluation procedures will not obviate the need for increased funds. We believe the Government has three options:—

- (a) to divert resources from other public expenditure;
- (b) to increase taxation, perhaps on road users;
- (c) to permit private enterprise to provide finance through toll schemes.

6.21 In so far as diversion of resources from other areas of public expenditure is concerned, we feel that some reductions in spending on country and minor urban roads could and should be considered as a means of making more resources available for the national roads. Thereafter, such questions take us outside the competence of this study. We have argued above that conflicting public expenditure priorities between roads and, for example, the housing sector, must be settled at the most senior levels of Government.

6.22 The second potential source of funds for increased road investment is higher taxation. Inevitably, it will be argued that the necessary extra tax revenue should come from the road user, but on any reasonable basis of comparison road users are in aggregate already paying sums in taxation which comfortably exceed expenditure on the road system. A study for the National Prices Commission (8) examined the balance between road user taxation and Government expenditure on roads in 1969/70. This showed that even adopting a wide definition of costs which included policing, lighting, cleansing, accidents and administration as well as maintenance and improvement, and adopting a narrow definition of relevant taxes, which included only petrol and diesel duties and road fund licences, all classes of user were contributing sufficient to cover the costs they imposed.

6.23 We have examined recent trends in expenditure and taxation. Between 1969/70 and 1977, expenditure on the maintenance and improvement of the road system rose from £18.8 million to £68 million. In 1969/70, improvement and maintenance was estimated to account for 67% of total expenditure and on this basis the total expenditure figure for 1977 would be £101 million. In the same year, excise duty (excluding VAT) on petrol raised £111 million and on diesel £13 million. Road fund licences yielded £33 million. Thus total revenue exceeded expenditure by 55%. The discrepancy would be even greater if account were taken of such items as VAT and excise duties on cars and spare parts.

6.24 It must be recognised that there is considerable scope for discretion in deciding which expenditures and taxes are appropriate for inclusion in studies such as these. We have therefore also examined the EEC's draft first Council Directive on the adjustment of national taxation systems for commercial road vehicles. The objective of this directive is to lay down taxation criteria for a range of different goods vehicles, and as such the proposed methodology is far more detailed than we have employed here. Moreover, the proposals relate only to commercial vehicles. However, we find considerable consistency in the approach. Both excise duty on diesel and road fund licences are acknowledged to be eligible for inclusion on the tax side, whilst VAT and other duties are excluded. On the expenditure side, the main difference from the approach in the National Prices Commission study which we have followed is that the EEC makes no allowance for accident costs.

6.25 Though different results might be obtained from a more detailed study for individual classes of vehicle, we are able to conclude that taxation receipts from road users as a whole comfortably exceed the public expenditure incurred for their benefit. The reason for the discrepancy between expenditure and receipts is that the Irish Government, quite rightly, acknowledges no necessary connection between taxation and expenditure in this area. Rather, petrol and vehicle taxation are seen as convenient sources of Government revenue. This has been the case for many years now, in spite of the existence of a Road Fund until recently. This fund used to receive revenue from vehicle licence duties, and finance the road system from

the receipts. But, after 1966, all increases in duty were taken direct to the Exchequer, and the fund received a topping up grant from the vote of the Department of Local Government. Thus the fund had been abolished in all but name long before its formal demise.

6.26 Levels of expenditure and taxation are not, therefore, related. In any case there is no obvious reason why capital expenditure should be financed on a pay-as-you-go basis as if it were current expenditure. On normal commercial financing criteria it would be more reasonable to expect road users to pay interest and provide for amortisation of the investment than to pay for it fully in the year that it is constructed. We would not therefore argue that the increased expenditure on roads should necessarily be provided by increased taxation on road users.

6.27 Another possible source of finance for better roads is the private sector, which might be prepared to invest in tolled facilities. A proposal for toll roads has been put forward by the Confederation of Irish Industry, and accepted by the Minister for the Environment, who is promoting legislation. We wish to draw attention to some of the drawbacks of this method of financing road investment. Toll roads have a number of undesirable features. Manpower and capital investment are devoted quite unproductively to the collection of tolls, which increases the cost of the road. Entry and exit points have to be restricted to keep toll collection costs down, and this is particularly undesirable in a country such as Ireland where the widely dispersed population outside the major urban areas argues for many access points. When a tolled facility is opened, traffic which would otherwise use the improved facility may instead continue to use the existing network to avoid paying the tolls. It is common experience that this is particularly true of heavy lorries. This can considerably reduce the benefits which accrue from the investment.

6.28 Notwithstanding these objections, tolled roads might be desirable if the choice lay between tolled roads and no roads at all. This could be the situation if the private sector in Ireland and international agencies and organisations were prepared to invest in tolled facilities, but not to make loans to the Government for it to invest in untolled roads. In the case of funds provided by the private sector in Ireland,

resources made available will probably be diverted from commercial and industrial investment, and the Government will wish to consider whether this is an attractive prospect. In so far as international agencies are concerned, it has been put to us that EEC agencies, such as the European Investment Bank, favour toll roads. We have ascertained that this is not so. They also recognise the force of the arguments against toll roads deployed above.

6.29 We have argued above that road users already pay in taxation considerably more than the cost of providing the road system; and that there is no necessary reason why they should be expected to finance further capital expenditure on the road system out of current taxation. Nevertheless, if for reasons of public expenditure control, the extra investment has to be recovered directly from road users then we would strongly recommend that the required funds are collected through petrol and diesel taxation rather than by instituting toll roads. This method of financing road construction will lead to both cheaper roads (since it will not be necessary to construct toll collection facilities) and to a more efficient use of the road system than the construction of toll roads. In practice we suspect that it would in any case be difficult to find routes for toll roads which were financially viable, so long as the existing parallel routes remained open and free from tolls, but we believe such facilities are undesirable regardless of their commercial viability. Tolling should be a last, and we would hope an unnecessary, resort.

CHAPTER 7

ROAD HAULAGE

7.1 Some of the basic background statistics on freight transport have already been presented in Chapter 2. The most notable feature to emerge was the great preponderance of own account operations, which probably account for about 90% of road haulage and about 75% of all internal freight transport on a ton mileage basis.

7.2 Much attention has been focused on this phenomenon in recent years because of the marked difference between experience in Ireland and in the other countries of Western Europe. Some comparative figures were quoted in a recent debate in the Dáil (19). While own account operators may have carried as much as 90% of the road freight tonnage in Ireland, the corresponding figures in Germany, France and Belgium were about 60%, in Italy 50%, the United Kingdom 45% and in the Netherlands about 40%. These are undoubtedly significant differences which have concerned all those who operate or require freight transportation, as well as the Irish Government itself.

7.3 The basic concern has been the low level of development of the licensed haulage sector, rather than the scale of own account operations *per se*. This has resulted in a number of complaints from industrialists, both individually and through the medium of the Confederation of Irish Industry, to the effect that the road haulage industry simply fails to meet their needs. Firms would prefer to devote their management and capital resources to running the business they were set up for, but find that they have to run their own transport fleets as the haulage industry is both too expensive and too unreliable to meet their requirements. This view of the industry emerges clearly from the Arthur Andersen Report (2).

7.4 Over the years, the Irish road freight industry has been subject to restrictions. The number of haulage licences on issue has been limited since the 1930s, when controls were introduced to protect the industry and the railways from the worst effects of the depression. In addition, own account operators have suffered restrictions through prohibitions on carrying backhauls for payment and on the leasing of vehicles.

7.5 Though a number of relaxations have taken place in recent years, the latest under the 1978 Transport Act, the general restrictive framework has been maintained. The present position is that while a haulier still requires a licence the number of vehicles which may be operated has been increased sixfold by the provisions of the Road Transport Act 1978, subject to an overall maximum of eighty vehicles by any one licensee regardless of the number of licences he holds. A number of exceptions are granted from licensing requirements, for lorries of less than 2½ tonnes unladen weight, for the carriage of certain agricultural commodities at harvest time, and for hackers, who operate vehicles within specified distances of the major urban centres of Dublin, Cork, Galway, Limerick and Waterford. Though exemptions of this type existed before 1978, they have all been extended under the Act. The leasing regulations for own account operators have also been relaxed slightly in that a firm may now lease a vehicle, provided that it does so from a company with a haulage licence. The only road freight operator not subject to these restrictive arrangements is CIE, which has no limits on the number of lorries it may operate. Inevitably, this has led to complaints of unfair competition from licensed hauliers.

7.6 The argument that this restrictive legislation inhibits the road haulage industry's development has recently been set out in reports by Arthur Andersen (2) and Kearney (4) as well as in policy statements by the Confederation of Irish Industry. However, the argument is by no means new. As long ago as 1970, in a debate on a Road Transport Bill (18) to liberalise road haulage, the then Minister for Transport and Power argued that: "... the rigid restrictions of the Road Transport Acts led to reduced efficiency and to a consequent inordinate growth of carriage on own account..." He therefore announced that his aim was: "... to proceed by stages so as to permit the existing haulage industry to expand and improve to the point where we can consider the

complete removal of quantitative restrictions....” When the 1978 Transport Bill was being debated (19), the Minister for Tourism and Transport reached remarkably similar conclusions: “The ultimate objective of policy would be the creation of a haulage industry free from the frustrating quantitative controls which have given rise to so much inefficiency and regulated rather by the quality of performance required of its members. Taking account of the regulatory system that has existed until now, an unduly rapid transition to that objective would, in my view, prove disruptive”. We support the objectives put forward in both 1970 and 1978 and believe that a more liberal policy towards road haulage is required. However, we believe the time scale under which progress is being made towards this objective is too slow; we are not convinced that the effects of immediate liberalisation would be disruptive.

7.7 The arguments for removal of the present quantitative controls are both apparent and widely acknowledged. The licences themselves are valuable commodities (the current price is said to be £10,000), a prospective operator has to purchase one from an existing owner before he is allowed to operate, and this inevitably pushes up the costs of road haulage and of all the goods that are carried by road. Restrictions on backhauling by own account operators have a similar effect since an industrialist is not allowed to carry a return load for another firm even where he could quote a highly competitive price for doing so and thereby reduce costs. Restrictions on vehicle leasing serve to tie up a businessman's capital in freight vehicles where they might otherwise be used for the expansion of the business proper. Moreover, the whole system imposes unnecessary administrative costs on the Government in general and on the Gardai in particular to ensure that the various regulations are observed.

7.8 The case against such controls is very strong and it would be in the interests of the economy and of consumers if the present limits on the permitted number of licences were removed to make entry to the industry free of all restraints other than qualitative ones (see below). The maximum limit of eighty vehicles allowed for any one firm should also be removed. The sixfold increase now allowed is itself very great and it is not clear why any limit should be set on the number of vehicles an operator may have.

7.9 In our opinion, there is little likelihood of liberalisation leading to excessive concentration in the industry, and hence to a monopoly situation. The available evidence suggests that there are few economies of scale in road haulage. A recent survey in the United Kingdom, conducted in the course of an enquiry into Road Haulage Operator's Licensing (10), showed little difference between the profitability of haulage firms with 6 to 20 vehicles, and haulage firms with over 100 vehicles. Moreover, experience throughout the world suggests that where there is free entry, road haulage remains a highly competitive industry.

7.10 International experience also suggests that there is little substance to fears that liberalisation would lead to excessive competition. We would only draw attention to the experience of Australia, Sweden, Switzerland and the United Kingdom, which have in theory and in practice, and of Belgium which has in practice, very liberal systems. Such evidence as we have suggests that rates of bankruptcy and closure of enterprises are not unduly high and certainly not to the point where the consumer and the economy suffer more from liberalisation than they do from the effects of restrictions on entry. The chief cause of low profitability in haulage, as elsewhere, is depression in general economic activity, though the profitability of the Irish haulage industry is, to a large extent, self regulating through the price of haulage licences. When economic activity rises, so will the opportunities for, and profits from, road haulage. However, this in turn will lead to a rise in the price of haulage licences and reductions in profitability to offset the initial rise.

7.11 Perhaps the most important consequence of liberalisation would be to increase the efficiency with which vehicles are used. We would particularly expect some increase in utilisation of own account vehicles if they were allowed to carry goods for other firms and to lease vehicles freely. While such relaxations in themselves would clearly not be favourable to licensed hauliers, it should be borne in mind that the fundamental objective of policy is to make the transportation of goods as cheap as possible. If own account operators are in the best position to do this, then they should not be restrained from doing so.

7.12 However, we believe that a major factor accounting for a proportion of own account operations very substantially higher than is the case in most other countries has been restrictions on the for hire and reward haulier. We would expect liberalisation to lead generally to a reduction in own account fleets and to companies making greater use of hauliers, especially for any peaks in the traffic they handle.

7.13 While we are strongly in favour of further liberalisation or indeed of abolition of the quantitative licensing restraints, and of the restraints imposed on own account operators trading for hire and reward, we consider there is a need to impose stricter control on quality standards within the industry. In the past there have been few qualitative restrictions on entry, of the type adopted in Britain though a number of measures are now being introduced in response to EEC directives. Since 1978, new entrants to the road haulage industry are required to hold a Road Freight Certificate, as a result of the EEC directive on access to the haulage profession. To obtain the certificate, a prospective entrant must prove good repute, financial standing and professional competence to the Department of Tourism and Transport. Vehicle testing, for mechanical safety, is also required under EEC directives, and power to hold such tests already exists under present legislation. We understand that such tests are to be introduced by 1983 for larger goods vehicles, buses, taxis and ambulances. Their introduction will be phased, and it is hoped that testing will eventually be extended to cars and motor cycles. EEC directives are also placing limits on the permitted working hours of lorry drivers.

7.14 However, it is noteworthy that all these measures have been introduced because of developments in EEC policy, rather than as independently evolved policies of the Irish Government. What has happened suggests that the Government does not regard qualitative control of the road haulage industry as a matter of high priority. Though we have no statistics to prove it one way or the other, the feeling is that there are no special problems of goods vehicles causing accidents of abnormal severity either because they are mechanically defective or for other reasons. In areas which are covered by long standing legislation, such as the control of drivers' hours, several organisations have

suggested to us that the regulations are not well enforced because other pressures on the Gardai make it impossible for them to attach high priority to this.

7.15 We would, however, urge that rather than reacting to EEC directives, which to some extent represent the lowest common denominator of the policies of Community members, the Government should adopt a complete policy on road goods vehicles to help achieve its declared aim of raising the quality of the road haulage industry. This is most unlikely to happen of its own accord, as higher quality will almost certainly mean higher cost. In the long run it may well be in the interests of the industry itself to offer a better service at a somewhat higher price, and a number of concerns have achieved a good reputation in the eyes of industrialists by offering a reliable service and would welcome increased quality controls, provided they were adequately enforced. But there will always be some firms who will cut costs and hence prices by driving overlong hours or keeping old and dilapidated vehicles in use notwithstanding the poor performance to which this leads. As a result, the image of the whole industry suffers in the eyes of the public and of industrialists.

7.16 The origins of road haulage policies in most EEC countries lie in restrictive controls to protect the railways and the established road hauliers. While most EEC countries are now pursuing, openly or covertly, policies that have been progressively more liberal, the residue of old attitudes remains. We would argue that the most important functions of a regulatory system are now the promotion of safety and possibly also to help protect the environment and limit wear and tear on the road system. Achievement of quality in these areas requires that attention be given not only to the licensed haulage sector, on which EEC policy is most focused but also own account operators, towed wagons and other vehicles not used for the carriage of goods, but which are unlicensed and liable to inflict harm.

7.17 It is also important to bear in mind that higher quality will only be achieved if there is adequate enforcement of regulations. Perhaps the main contribution the Government could make here is to repeal the

quantitative licensing restrictions, with all their enforcement implications, thus releasing Garda resources in particular for qualitative control. In addition, however, there may be areas where the Gardai could be assisted by non-police auxiliaries because the specialist expertise that the police alone can offer is not required; but the implications of this would have to be examined carefully.

7.18 We recommend that the changeover from quantitative to qualitative controls should not be long delayed. One of the reasons for this, which may appear paradoxical, is that we do not believe the effects of the legislation will be very dramatic, although in the long run we consider they should be beneficial both to the licensed haulage industry and to industry more generally. Irish economic geography militates against a large licensed haulage industry. Although we would expect some expansion in the role of licensed hauliers relative to own account carriers, we would anticipate that own account will still retain a higher market share than that in other countries in the EEC.

7.19 One of the reasons for this is that the structure of economic activity in Ireland is such that backhauls are not generally available. An operator who can obtain return loads will be able to offer lower rates; figures obtained by Arthur Andersen (2) substantiate this as rates charged for a return journey with a backload are typically only 50% higher than rates charged for a single journey without. The operator will not only charge lower rates, but also earn higher profits. This in turn will serve as an incentive to expansion and as an operator grows bigger he becomes more widely known, which is likely to offer yet greater opportunities for obtaining backhauls. Operators obtaining return loads ought to be able to offer such competitive rates that industrialists decide that it is not worthwhile to continue with own account haulage operations. Thus the absence of widespread opportunities for backhauls reduces the advantage of licensed hauliers over own account operations. A further factor tending to the same effect is the short distances for most freight carryings. It is simply not worthwhile to seek a return load in a situation where the journey back to the home depot is relatively short unless the collection point for the load is close to the delivery point, with no delay while waiting to collect the load.

7.20 When the 1976 survey of licensed hauliers was conducted, it was found that some 64% of the operators in the industry had only one vehicle, constituting 23% of the total vehicle fleet. A further 32% of operators had between two and five vehicles, and owned another 28% of the vehicle fleet. These percentages would be increased significantly if hackers were brought into the reckoning, but virtually nothing is known about these other than that they are generally small businesses. Concentration in the industry has increased somewhat in recent years. But the evidence is still overwhelming that small firms continue to be willing to enter the road haulage industry, and can survive in it in competition with the larger enterprises which ought, in principle, to be able to obtain backhauls more easily, offer more competitive rates and pay higher prices for any licenses that become available. This is confirmed by a recent survey conducted for the National Prices Commission, which showed that 11% of licensed haulage firms had entered the industry within the last two years.

7.21 We thus consider that even after further liberalisation or abolition of the quantitative restraints on road haulage operations, own account operation would still be the predominant form of road transport, with licensed road haulage provided by a large number of separate companies. There should, however, be more scope for one or more large private companies to develop so as to provide more extensive service to those industrialists who do not wish to rely on own account operations.

7.22 We have concentrated so far almost exclusively on the private sector of the industry, and its future organisation. We also need to consider the prospective position of CIE road freight operations in any new structure. CIE is currently the largest road haulage operator. It is criticised on two grounds. First, that it is able to compete unfairly because it is not restricted by the licensing regulations, and second that it appears to be inefficient.

7.23 The first complaint, undoubtedly, has some substance, in that a private haulier is clearly disadvantaged in relation to CIE if he has to spend £10,000 on purchasing a licence before he can begin operations. However, it is easy to exaggerate the significance of this difference.

One way of quantifying its possible effect is to assume CIE had to buy a licence for £10,000 for each of its lorries in 1977. This would have cost £7 million. The resultant interest bill at an interest rate of say 10% would be £700,000 which would therefore require charges to be raised by about 7%, assuming no loss of volume. This would hardly be of major significance.

7.24 The second criticism levelled at CIE is that it is less efficient than private hauliers. It is possible to produce a series of apparently damning statistics which show private hauliers running a far greater mileage and carrying a far greater tonnage both for each person they employ and for each vehicle they operate. We do not regard such comparisons as particularly useful as CIE and private hauliers are providing different sorts of services. In many areas, CIE's services are designed to do little more than feed traffic on to the rail network. As such they are basically short haul, and their apparent efficiency is bound to be poor.

7.25 The role of road freight in CIE's overall organisation is the major reasons why its business is so different from that of private hauliers. We have already drawn attention in Chapter 4 to the subsidiary position that road freight operations occupy in relation to the railway. As a matter of policy, road freight transport is not widely offered on routes also served by rail, while the railway is free to purchase haulage services from an external contractor or the road freight division depending on which offers the more competitive rate.

7.26 CIE's road freight services are not just a rail subsidiary. They operate in an independent role in some situations, for example, in areas of the country which are not served by the rail network and in providing certain international road transport services to Britain. They must, of course, compete with licensed hauliers and own account operations in the provision of such services. The scale of the activities has been contracting in recent years. In 1974, CIE were informed by Government that road freight services should at least break even financially, so that in line with EEC directives on transport policy they would not require subvention. CIE management responded by increasing charges and

reducing the services offered through the closure of depots and withdrawal from unprofitable activities such as local authority tipping. The rundown is illustrated in Table 16.

TABLE 16
Mileage Run and Tonnage Carried by CIE Vehicles 1973-1978

	Mileage Run		Tonnage Carried	
	Number (000's)	Index	Number (000's)	Index
Year ending 31st March				
1973	17,959	100	3,786	100
1974	18,076	101	4,085	108
Nine months ending				
31st December 1974	12,460	93*	2,752	97*
Year ending 31 December				
1975	14,563	81	3,109	82
1976	13,973	77	3,040	80
1977	12,924	72	3,066	81
1978	12,761	71	2,956	78

Note: *Annualised.

Source: CIE Accounts.

7.27 This contraction has been accompanied by improved financial performance. Road freight services were profitable in 1972/73, but incurred mounting losses thereafter until the end of 1975. However, the service broke even in 1976 and 1977, and it is CIE policy that this should continue. Road freight services are, therefore, in an unusual position within CIE in that they are able to operate without the need for any subvention, but, over large parts of the country it is CIE policy that they should not market their services and compete with the railway.

7.28 A report to the National Prices Commission (8) and the McKinsey Report (3) have recommended that road freight operations should both be run as a separate organisation and allowed to compete for traffic currently carried by rail. The argument for such an approach is that there are private hauliers who will provide an alternative service if CIE refuses to, and hence the absence of competition from the CIE road freight division does little if anything to protect the railway. CIE has not been willing to act upon such recommendations. It considers its prime function to be the operation of the railway and bus services. Other activities are peripheral, and only entered into so far as they can serve the ends of the main business.

7.29 We have considerable sympathy with both arguments. On the one hand, it is wrong to deny industrialists road freight services when they can be provided profitably and in many cases, no doubt, more quickly than rail services. On the other hand, the potential organisational conflicts arising from operating competing road and rail freight businesses within CIE are enormous. In our view, there are four basic options which the Government should consider. These are:

- (a) close down CIE road freight operations altogether;
- (b) instruct CIE to run competing road and rail freight businesses;
- (c) separate road freight operations from the remainder of CIE and run them as an independent semi-State organisation;
- (d) carry on as at present.

7.30 We consider the possible closure of CIE road freight operations first. A political argument for such action has been put to us, that there is no need for the State to have any involvement in road haulage, as these services can equally well be provided by the private sector. While accepting that this is a possibility, there is in our view no objection to the State being involved in road haulage provided that such activities are run on a commercial basis, and are not given special privileges relative to the private sector of the industry. The only area in which these criteria are not met at present is licensing, and we have argued above that these restrictions should be removed from the private sector and are probably of no great financial significance to CIE. In the

circumstances, any decision to close CIE's road freight division would, in our view, be change simply for change sake. It would be disruptive to industry generally because of CIE road freight's large market share in licensed haulage, disruptive to the railway because the feeder services to and from railheads would be lost, and disruptive to the workforce who would be obliged to seek new jobs. It would also deprive Ireland of the one licensed haulier who comes close to providing a national service, albeit in conjunction with the railways.

7.31 We do not think the second option of requiring CIE to operate separate road and rail freight businesses competing with each other is reasonable. The basic will to do this does not exist for the very good management reasons discussed above. The potential advantage of combining road and rail transport so as to provide the least costs overall transport system which exist inside a combined rail/road organisation could also be lost if the two sections of CIE were set up to compete with each other.

7.32 The third option would be to separate totally CIE's road freight services from the rail services by setting up a new State corporation distinct from CIE. This option has a number of attractions. We believe it would be the quickest route by which Ireland would obtain a high quality national contract haulier, building on the size and experience of the existing CIE road haulage operations. The new organisation would be able to offer a better service than is available at present because it would not feel prevented from contracting for any type of traffic by the need to protect the railway's interests. It should also be profitable without the need for any Government subvention since it is already breaking even in its present constrained working environment.

7.33 There are, however, also a number of disadvantages to this option. First, it might lead to increased administrative costs through duplication of functions in the two organisations. There would be particular problems in disentangling the existing CIE management structure in which, for example, road freight is only one of the responsibilities of the CIE area manager. New buildings and offices might have to be found at considerable cost.

7.34 There is also a serious danger that separation of CIE's road freight operations would place all rail freight operations other than bulk hauls from one private siding to the docks or another private siding, in a highly vulnerable position. The railway cannot carry many types of freight without the assistance of road hauliers at railheads, and hence needs guaranteed services if it is to seek traffic. This is effectively provided within the present CIE structure, but would not be if road freight operations were split off. We believe this problem could be overcome, by obliging the new semi-State road haulier to provide the railways with freight services, albeit at a price, when and where it requires them. This would not be an onerous requirement; CIE's road freight division is already discharging just such an obligation. Nevertheless, a strict intercompany agreement of this nature could prove more difficult to handle and less efficient than the current arrangements, whereby the CIE area managers can use their judgement to deploy the road vehicle fleet in the most effective manner taking into account both the needs of the railway and the other demands on the road vehicle fleet.

7.35 We have given this matter considerable thought, and while we recognise the potential attractions of setting up a separate State road haulage company based on the existing CIE operations, we have concluded that on balance it would be better to adopt the fourth option and continue with the existing pattern of operations. We consider the potential costs of any reorganisation at this time would outweigh the potential advantages. In particular, we feel that it is important that CIE should be given a period of time in which to consolidate the potential gain from the major reorganisation of freight sundries movement, involving an integrated road-rail-road handling system which has recently been completed before any further radical changes in CIE's organisation pattern are introduced. Any reorganisation would be particularly inappropriate while the review of railway policy which we recommended in Chapter 4 was in hand.

CHAPTER 8

CIVIL AVIATION

8.1 The main civil aviation services provided from Ireland's principal airports at Dublin, Cork and Shannon are international. There are scheduled services from Dublin to London and most of the regional airports in the United Kingdom and to cities in Belgium, Denmark, France, Germany, Italy, the Netherlands, Switzerland and Spain. Scheduled services are also operated between Ireland and the United States and Canada. There are regular services from Cork to six cities in the United Kingdom as well as direct flights to Paris and Amsterdam and one flight a week to Dusseldorf. Other European cities can be reached by connections at either Dublin or London. Shannon has a direct service to London and connections to other cities through Dublin. Most of the international services are provided by Aer Lingus, in conjunction with the relevant national carriers.

8.2 Aer Lingus are also the main provider of internal services, operating a limited number of flights between Dublin and Shannon, most but not all of which are part of through services to North America, and one or two flights a day between Dublin and Cork. Two smaller companies, Aer Arann and Ireland West, have been authorised to provide small scale internal air services. However, most of the services have been dropped because of lack of traffic, and at present only Aer Arann are authorised to provide a scheduled service between Galway and the Aran Islands, and Dublin. There are also a number of small air taxi and charter operators who provide services within Ireland and to points in the United Kingdom.

8.3 Clearly one reason why internal civil aviation has not developed rapidly in Ireland is the relatively short distances between the main

traffic centres. Dublin to Cork is only 160 miles and Dublin to Limerick only 122 miles. However, the potential for developing small scale air services between Dublin and the principal cities in the West of Ireland is growing with rising levels of economic activity and with technical changes in the range of available aircraft. In recent years a number of aircraft such as the Britten Norman Trislander which seats up to 17 passengers have been developed which can be operated economically from small airstrips. At present a new generation of 50 seater aircraft is also being developed designed to operate from airports with short runways. While it would probably not be economic to build new airstrips just to cater for air taxi and commuter services usable surfaced aerodromes already exist at Bantry, Castlebar, Galway, Tralee and there are a number of other grass airstrips. The provision of scheduled air commuter and air taxi services to the four airstrips mentioned above with connections to Cork, Shannon and Dublin could prove a major attraction in helping to encourage industrialists to locate new industrial development in the West of Ireland. To obtain the major benefit from such services it would, however, be necessary to provide some further investment particularly in airstrip lighting so that evening services could be provided throughout the winter months.

8.4 We consider that the Irish Government should continue to adopt its present attitude of encouragement towards such services. In particular it should resist any temptation to restrict development as a means of protecting the railway. Domestic air services, particularly over the short stage lengths that would apply in Ireland, are likely to attract two categories of passengers. These are first transfer passengers who wish to travel to Dublin to obtain onward flights. It is clearly more convenient for such passengers to travel by air direct to Dublin airport rather than by rail to Dublin and then by bus or taxi to the airport. In the absence of direct domestic air services such passengers are most likely either to travel by road to the airport, or to travel direct from a local airport, transferring in London or Paris. In the latter case Aer Lingus may lose a considerable amount of revenue unnecessarily; it is common practice for international airlines to accept apparently poor profitability on internal services to attract passengers to its international flights. The second main category of domestic air traveller are likely to be businessmen who either live near their home airport or wish to make a

day trip to points which are more conveniently served by the destination airport than an in-town railway station. Again, for many the main alternative to air may be road rather than rail travel.

8.5 We do not believe the Government's policy of encouragement should be extended to include the direct subsidisation of internal air services. Aer Lingus may be willing to consider apparently loss making services because of their potential contribution to profitability on international flights, as discussed above. But this should be a commercial decision for Aer Lingus to make. The social case for subsidised air services is weak given the availability of alternative services by rail and road on virtually all the potential routes. However, other steps that the Government could take to encourage Aer Lingus or private operators to provide scheduled, charter or air taxi services should be welcomed.

CHAPTER 9

URBAN TRANSPORT

9.1 There is probably no major city in the world that does not have difficulty in deciding how to organise its transport system. The problems in determining the correct balance between public and private transport and in deciding the mixture of regulatory, pricing and investment decisions which will best bring about this balance would be complex enough even without the existence of conflicting land use and environmental objectives and limitations on available resources. Moreover, the scale of the problems generally increases in proportion to the size of the city.

9.2 Irish experience illustrates this situation well. While a number of towns are faced with difficult transportation decisions, none of them approach Dublin in the scale of their public transport provision and congestion problems. A useful crude indicator of comparative importance is provided by CIE statistics on bus operations. In 1977 Dublin city bus services travelled almost 30 million vehicle miles, and carried over 200 million passengers. The comparable figures for all other city services taken together were 4.4 million vehicle miles and 32 million passenger journeys. Receipts from Dublin services were £23.4 million; from other urban services £3.7 million.

9.3 While it is an exaggeration to say that Irish urban transport problems are the problems of Dublin, nevertheless we believe we are well justified in this study in concentrating on Dublin. The problems of the other cities are discussed more briefly at the end of this chapter.

9.4 At present the responsibilities for planning and operating the transport system in Dublin are divided between a number of organisations. The Corporation through the City Engineer is responsible

for the provision and maintenance of the road system, although some of the finance for road development is provided from central Government funds through the Department of the Environment. The operation of the public transport system is the responsibility of CIE, relying for investment on funds provided by central Government through the Department of Tourism and Transport. The land use planning for the city of Dublin is the responsibility of the City Planning Department. Short-term traffic management is the responsibility of the local authorities acting at the request or with the consent of the Gardaí, who are the traffic authority. At local Government level, three authorities (the City and County of Dublin and Dun Laoghaire Borough) have transport responsibilities, with a variety of formal links between them. However, the only level at which all three authorities are co-ordinated is that of the City and County Manager.

9.5 The city planning department are responsible for land use planning. They were involved in the Dublin Transportation Study (see below) and have produced a long-term plan for the development of new satellite communities such as at Blanchardstown, and Tallaght to the West of Dublin. It is, of course, crucial that adequate transport facilities are provided to these new developments. The city planning department have recently prepared a revised city plan. Its publication has, however, been delayed because of the lack of agreement on the transport component of the plan.

9.6 As in many cities of comparable size, traffic congestion is an increasing problem. CIE have estimated that as a result of rising congestion average bus speeds in central Dublin halved between 1970 and 1977 from 14 to 7 miles per hour. The periods of the day over which such low speeds are experienced are becoming longer, and at peak periods they sometimes drop as low as 3 miles per hour in particularly congested areas. While precise statistical comparisons are impossible it is likely that traffic speeds are lower in Dublin than in most cities of comparable size in the United Kingdom. After the Dublin Transportation Study a comprehensive set of road development proposals were prepared. However, for various reasons there has been far less progress than was anticipated towards the implementation of the road development programme.

9.7 Dublin is extensively served by public transport; it has both a widespread bus service and a suburban rail system on the routes of the national rail network. When the Dublin Transportation Study (20) was conducted in 1970/71 it was found that over 40% of the trips in the area by Dublin residents were made by public transport. The buses were far and away the more important of the two modes. CIE accounts for 1970/71 show that less than 5 million journeys were made on the suburban railway, whilst over 200 million were made on the buses. Average journey lengths were somewhat longer on the railway. Since the Dublin Transportation Study was undertaken, the relative importance of the railways has increased. Between 1971 and 1977, the number of passenger journeys made by rail increased from under 5 million to over 8 million whilst bus usage stayed fairly constant at a level of about 200 million passenger journeys. But clearly, the bus is still predominant.

9.8 At present both rail and bus are losing money. Expenditures on the suburban railway are impossible to disentangle from the figures for the railway as a whole. However, some analysis of these figures was undertaken by CIE in the context of a National Prices Commission study (9). In 1971/72, the revenue of the suburban services was £342,000. The avoidable costs of providing them was £791,000, which is well over twice the revenue. In addition, joint costs of £718,000 were allocated to these services, which means that the overall deficit of £1,167,000 exceeded revenue by a factor of three. There was a loss of 21.6p for every passenger journey made. Since 1972, there has been a deterioration in the financial position of the railway as a whole, as shown in Chapter 4. The total deficit has risen from 31.5% of expenditure in 1972 to 51.7% in 1977. On the other hand, revenues have been somewhat more buoyant on the suburban services than elsewhere, rising by 190%, compared with 135% for mainline and other services. It has recently been estimated that the suburban railway is losing over £3 million a year at 1978 prices (5), which amounts to about 37p per passenger journey. CIE argue that this is wholly the consequence of their obsolete and labour intensive suburban rail system, though the gap between revenue and expenditure is so great that we doubt if the system could ever be operated without considerable losses.

9.9 In the early 1970s the Dublin bus services were breaking even. However, as Table 17 shows, between 1972 and 1974 there was a rapid decline into unprofitability.

TABLE 17
Dublin City Bus Services Finances 1968-1978

Year	Receipts (£000)	Surplus (Deficit) (£000)	Surplus (Deficit) as % of Receipts
Year ending 31st March			
1968	6,349	118	1.9
1969	7,022	177	2.6
1970	7,678	61	0.8
1971	8,423	(285)	(3.3)
1972	10,068	186	1.9
1973	11,014	(360)	(3.2)
1974	12,972	(967)	(6.9)
Nine months ending 31st December			
1974	8,145	(2,943)	(26.5)
Year ending 31st December			
1975	16,813	(5,035)	(23.0)
1976	19,541	(5,997)	(23.5)
1977	23,749	(4,782)	(16.8)
1978	27,091	(5,195)	(19.2)

Source: CIE Accounts.

In large part, this was due to the policy of the Irish Government acting on the advice of the National Prices Commission. Fare increases were deferred in 1972/73, 1973/73, 1974 and 1975 and the Government granted explicit subsidies to reduce fares in 1975. Losses on the buses now amount to about 2½p per passenger journey.

9.10 Thus public transport in Dublin is losing money. In this respect, the city differs little from towns of comparable size in Britain or indeed Western Europe and North America, and the bus operators in most European cities receive subsidies which are larger as a proportion of revenue earned. We believe that the policy of subsidised public transport may well be justified. If fares were higher, then public transport utilisation would be lower and passengers diverted to the private car. This could impose heavy social costs through the congestion and accidents caused.

9.11 We drew attention above to the division of transport responsibilities in Dublin between a number of organisations. The one significant effort to develop a co-ordinated transport and planning strategy was the Dublin Transportation Study. This was a co-ordinated exercise carried out in 1970/1971 jointly by Dublin Corporation, Dublin County Council, Dun Laoghaire Borough Corporation, Wicklow County Council, Bray Urban District Council, CIE, the Department of Local Government and An Foras Forbartha. However, when it was completed, the study team was broken up, and their recommendation that a co-ordinating committee should be created to direct the implementation of the programme and the continuing planning process was not implemented. Instead, much more limited co-ordination machinery was established under the City Manager.

9.12 Since the plan was completed, it has become clear that the resources required for its full implementation are not available. However, no organisation within the Dublin area is charged with examining conflicting investment priorities in roads and public transport. Even at Government level, no one Department is responsible for settling whether suburban rail electrification offers better or worse value for money than the Dublin roads programme. Indeed, existing arrangements do not even recognise that such proposals are in competition. Similarly, although the Government, through CIE, subsidises public transport in Dublin, there is no evidence that its level or its distribution between modes is influenced by the consideration of a comprehensive or even consistent urban transport policy.

9.13 The analysis of the Dublin Transportation Study indicated that over a period from 1971 to 1991, there was likely to be a massive increase in the use of both private and public transport. Travel in the area by car and commercial vehicles was expected to increase from 3.1 to 9.9 million vehicles miles per day, whilst trips by public transport were forecast to rise from 560,000 to 930,000 per day. While the absolute size of these increases might now be questioned the trend is clearly correct. There will be a very considerable increase in the demand for private car transport and also probably some increase in the demand for public transport.

9.14 These figures also make it abundantly clear that public transport must continue to play a significant role in meeting Dublin's transportation needs. Without public transport, traffic would have to be carried by private cars and lorries. Dublin is already congested, and it is simply not feasible to build all the necessary roads to carry the potential traffic demand. Even if new roads were built, increased road capacity would generate more traffic which would itself entail a requirement for yet more capacity. The conclusions of the transportation study itself on this subject are emphatic and undeniable:— "... it would be impossible, however, from both a cost and an environmental point of view, to adapt the city centre to an ever increasing level of motorisation. Certainly such an undertaking would in the process destroy the city centre. New roads would have to be built between the city centre and the suburbs, carving through existing developed areas and leading to an immense toll in residential and business relocation. An efficient public transport system must therefore be devised to serve the city centre".

9.15 Having accepted that full motorisation is neither feasible nor desirable, there are three types of policy which can be used to influence the course of events:—

- (a) investment in new infrastructure;
- (b) road and public transport pricing;
- (c) physical regulation of traffic.

The correct balance between public and private transport can be achieved by the balanced use of each of these three types of policy. Indeed, it is just such a policy that the study itself recommends:—"The recommendations, in the overall provide for the creation of an integrated transportation system. . . . Such an integrated system would consist of an effective regional highway network, together with improved public transport facilities." In practice there has been less progress than one would have hoped in implementing these policies since the Dublin Transportation Study was completed. Teams in the constituent authorities have continued to review the situation, but coordinated or indeed purposive action to solve the problem has not been forthcoming.

9.16 The transportation study put forward proposals, at 1971 prices, for investment in new infrastructure totalling £22.6 million for public transport and £122.4 million on highway works. The road proposals alone would cost over £400 million at today's prices. In addition, a study subsequent to the main transportation study (21) investigated the prospects for a rapid transit system in Dublin. This would cost about £220 million at today's prices (14).

9.17 Progress on implementing the road proposals has been delayed, partly by the strong opposition of certain sectors of the community to the proposed road improvements on environmental grounds and partly by financial constraints and uncertainty caused by the international economic situation and the oil crisis. As a result the proposals for road development in Central Dublin have been substantially modified, and reduced in scale and extent. However, these modifications to the programme have proceeded piecemeal, rather than on the basis of a revised overall strategy. This is an unsatisfactory way of proceeding in appraising urban road investments, where even piecemeal improvement of particular corridors should not be considered in isolation. The relief of congestion in some parts of a city can cause bottlenecks elsewhere.

9.18 It is possible to criticise the Dublin Transportation Study for producing a single programme rather than a range of options. But this

should have been less of a problem if, as the study recommended, a coordinating committee had been established to supervise the continuing planning process.

9.19 The Dublin rapid transit study was completed in 1975. Opinions on the project within the Dublin City Council appear to be mixed, and the Government has still not given a decision on the scheme. Planning of the city is in abeyance awaiting a decision. Both the Council and the Government are confronted by the dilemma that the scheme would only serve limited parts of Dublin region and therefore only a part of its population. For example, out of a total population of 1.3 million forecast for the study area in 1991, only 400,000 (30%) would live within 15 minutes of a rapid transit station. Based on a cost of £220 million at 1978 prices, the scheme would, therefore, cost £550 for every person living within 15 minutes of a station.

9.20 Despite the cost of the scheme the Consultants' report concluded that it was economically viable, basically for two reasons. Firstly, the scheme would enable CIE to make economies in operating costs on its diesel rail, and bus services. Secondly, the project would confer benefits on the people of Dublin through improved journey times, on both public and private transport, through improved parking conditions and through reduced accident rates. When valued in monetary terms, the two categories of benefit were of roughly equal importance. Since the study was completed, the sharp deterioration in the operating circumstances of the buses will have improved the viability of the transit proposal. However, the scheme would almost certainly necessitate higher subsidies to public transport in Dublin. This raises difficult questions of priority, given other demands for public sector finance both within and outside the transport sector.

9.21 Clearly, investment is an expensive way of solving urban transport problems, even in areas where it is not environmentally damaging. In the absence of the necessary funds for all the investment which might appear desirable, the role of the other policy instruments is enhanced. The transportation study had very little to say about pricing policy, but some general comments can be made in the light of the data

provided. Road use is not directly priced and, within the constraints of existing technology, it is most unlikely that the introduction of direct road user pricing would be worthwhile. At the national level, the levying of taxation on road users does constitute pricing of a sort, and Chapter 6 has already indicated that road users in the aggregate are paying taxes in excess of the expenditure on the road system incurred for their benefit.

9.22 This would suggest that road use is in general overpriced, or rather that it is contributing to general taxation as well as meeting road costs. However, such a conclusion, even if true in the aggregate, would not necessarily imply that all trips met their full marginal cost, particularly in an urban area such as Dublin, where congestion may mean that a motorist inflicts heavy social costs on other road users. The transportation study provides one indication that this occurs. It is stated that an extra 50 vehicles per hour on one typical street in the peak period would produce delays to other road users amounting in total to some 100 hours, i.e., two hours per extra vehicle. Social costs of this order would justify heavy charges on road users, which would divert some of them to public transport, with consequent social benefits. In the absence of the necessary policy instruments for road pricing one possible way of achieving the same results is to subsidise the public transport system, as is happening at present, though it is doubtful whether this would justify the enormous differences between the subsidies given to the trains and buses. However, experience shows that subsidisation of public transport has only a limited effect on the choice between different modes of transport. For example, the Dublin Rail Rapid Transit Study (21) concluded that the main influence on central area car traffic flows was the extent of central area parking capacity.

9.23 Regulatory policies, designed to ration the available road space, are another and often more effective method of influencing mode choice. Examples are the implementation of parking controls, or the creation of bus lanes in inner urban areas. Controls on parking have been intensified in recent years. The Dublin Transportation Study produced a number of recommendations including:—

- (a) the amendment of the requirement to provide on-site parking in new city centre buildings;
- (b) the continued systematic expansion in the use of parking meters;
- (c) an off-street parking programme under the control of the local authorities;
- (d) the removal of existing on-street parking in the most congested areas as off-street parking is constructed;
- (e) preferential treatment for residents in areas with high parking demand.

9.24 Although these recommendations have, in part, been followed, there still remain problems over enforcement. In particular, far too often for the general good, parking regulations are flouted with immunity. At one stage, traffic wardens were introduced to undertake some traffic regulation duties, but the Gardai have recently resumed these responsibilities. In the years ahead, it is virtually certain that intensified controls and enforcement procedures will be necessary to prevent congestion reaching intolerable levels, and this is an area to which increased resources will have to be devoted. It would seem to us that now, and increasingly in the future, the Gardai may have difficulty in providing the resources to give priority to enforcement of parking regulations and other traffic control measures. The Gardai are subject to conflicting calls on their time, and many of those calls relate to matters of far greater importance than parking regulations. Moreover, the enforcement of parking regulations has rarely, if ever, proved a source of public support for the enforcement agency. In other countries, the police have been keen to avoid responsibility for parking controls because of the risks of forfeiting public support. From this point of view, the elimination of the traffic wardens may prove to be a retrograde step, though it would be premature to attempt to reach any conclusion on this point until the special squad of Gardai who have taken over from the wardens have had time to demonstrate their ability to meet the stated objective of enforcing parking laws more strictly.

9.25 Integrated traffic management in major urban areas is particularly important in ensuring efficient public transport operations. We are surprised at how little has been done in Dublin to implement bus priority schemes, either by giving buses priority at junctions, or by establishing road space which is specifically reserved for buses through bus lanes or busways. Such developments have been increasingly introduced in Britain and North America, and they are probably the most effective low cost method for increasing bus journey speeds, and hence promoting the use of public transport.

9.26 The development of bus lanes was suggested in the transportation study where it was argued that "bus lanes should be provided along major radial routes into the city centre". However, to date there has only been one bus lane experiment in 1971 which lasted for just one week. In spite of the fact that the travel time savings to bus users exceeded the travel time losses to motorists these experiments have never been repeated, much less introduced on a full-time basis. Meanwhile with increasing congestion, average bus speeds in Central Dublin have continued to fall. We would strongly support CIE in urging the introduction of bus priority schemes in Dublin.

9.27 We would strongly support CIE in urging the introduction of more comprehensive traffic restraint and traffic management schemes in Dublin, particularly in the central areas. Only with such measures will it be possible to break out of the vicious circle whereby increasing congestion leads to slower bus speeds, higher costs, rising fares, mounting deficits and the diversion of more passengers to the private car creating still more congestion. We would specifically urge:—

- (a) the introduction of bus lanes in the city centre. CIE have a number of proposals for bus lanes, for example, in Parliament Street. By the standards of other European capitals, Dublin is a small city, and would neither require, nor perhaps be able to implement, bus lanes on the scale of London or Paris. Nevertheless, there are several streets in central areas where they could have a substantial beneficial impact. Experience in London would suggest that difficulties of implementation can be much exaggerated;

- (b) a sympathetic approach by the relevant authorities to any CIE schemes for bus priority at road junctions;
- (c) reductions in the amount of on street parking available in the central area;
- (d) efforts to ensure that such parking space as is available in the city centre is used by the short-term parker rather than all day commuters, who impose the heaviest burden of congestion. Pricing policy may well have a role to play here;
- (e) more intensive efforts to ensure that the parking regulations are enforced;
- (f) provision of adequate off street parking in areas where parked cars, rather than actual traffic levels, are major factors in causing congestion.

9.28 We believe that one of the main reasons why such policies are not being pursued at present is organisational. The several local authorities in the Greater Dublin area have responsibility for the road system divided between them whilst CIE operates the public transport. At Government level, the local authorities are responsible to the Department of the Environment: CIE to the Department of Tourism and Transport. Such arrangements are hardly conducive to the development of the co-ordinated transport policy so necessary in a large urban area.

9.29 The local authorities are predominantly concerned with the road system. They are not directly involved with the provision of public transport services and they are content to allow CIE to continue to operate the public transport services, realising the problems they would face if they took over direct responsibility. However, so long as they are not responsible for public transport, they have no direct financial incentive to provide the facilities such as bus lanes and other traffic control measures needed to improve the financial viability of the bus system. Equally, they have no objection to, and every incentive to encourage CIE to proceed with plans for a rapid transit system, so long as the funds for this system are provided from general central Government expenditure and not at the direct expense of their own

road investment proposals. Similarly, the local authorities are most unlikely to object to the partial financing of bus services in their area from general taxation. However, it can well be argued that such subsidies have undesirable side effects on land use by creating unduly dispersed patterns of development which mean they are not the most beneficial way of spending money in the Dublin area.

9.30 In the ultimate analysis, it is difficult to avoid the conclusion that the Dublin Transportation Study has so far achieved very little. After the final report had been produced and published, it was not accepted by Government and there was no body with executive authority responsible for its overall implementation. No one was responsible for updating the study on an ongoing basis or for taking account of the resource constraints which meant that it was not feasible to carry out the original investment programme. Nor was any single organisation put in a position to take a view on appropriate pricing and regulatory policies for all modes of transport in the area.

9.31 We believe that a co-ordinated transport policy for the Dublin area must be developed and implemented. The present situation with several Departments, local authorities and State-sponsored bodies all responsible for particular aspects of transport, but with no overall controlling organisation, is clearly unsatisfactory. We therefore recommend that a unified Transport Authority should be established covering all modes of transport in the Dublin Area.

9.32 Ideally, the scope of the authority's responsibilities should cover all the policy areas we have discussed in the preceding paragraphs. It would determine the scale of investment required in the Dublin area, and the priorities for that investment between roads and public transport. It would be responsible for pricing policy towards all modes of transport, and in particular for determining the appropriate scale of public transport subventions. It would decide regulatory policies, for example, on the control of parking and traffic.

9.33 However, these responsibilities must be discharged within the framework of existing political institutions, which would still retain a vital interest in transport issues after the establishment of the authority.

9.34 We have considered three possible options as to the reporting structure for the authority. These are that it should be responsible either to:—

- (a) Central Government through one or more Government Departments;
- (b) a body constituted from the local authorities in Greater Dublin; or
- (c) a mixed central and local body.

9.35 There would be substantial convenience if the authority reported to central Government; either to the Department of the Environment or of Tourism and Transport or (as we will argue later) to a single Department combining the transport functions of both. It would then be subject to the normal financial and administrative arrangements between central Government and other public bodies which ensure public accountability. But it would in effect be central Government who would be determining the public transport services of Dublin rather than local voices. As such it is inevitable that the authority would be criticised, rightly or wrongly, for remoteness from the needs of Dublin. The problem of establishing a good relationship with the local authorities could be considerable.

9.36 There is in many respects a strong case instead for requiring a Dublin Transport Authority to report to a council of local representatives drawn from the relevant local authorities. In this way not only should it be possible to ensure co-ordination of transport with other local authority activities but it should be more responsive to local needs; Councillors are in touch with local opinion to a greater extent than is possible for central Government. The difficulty is to reconcile such an arrangement with public accountability for grants paid to the authority. There need be no concern if as well as acting as a channel for central Government, local authorities were also putting money of their own into the authority. There would then be a proper financial discipline to encourage local authorities to restrain the authority's spending since they would both be concerned to receive value for ratepayers' money

and would also have to help meet any unanticipated deficit if there were a cost overrun or revenue shortfall. Since Irish local authorities no longer have substantial sources of revenue of their own, it is now more difficult to recommend such a solution. In the absence of a financial commitment to the authority on the part of the local authorities, there are grave risks that the Dublin Transport Authority would simply become a pressure group for greater spending by central Government on transport in the Dublin area.

9.37 We are, therefore, convinced that the authority should be a mixed body consisting of central and local Government representatives. Though both groups would be expected to take a full part in discussions of the authority's affairs, it would be inevitable that central Government representatives would pay close attention to the question of how much money it would be realistic for the authority to spend. The local authority representatives would be concerned to make sure that the services provided reflected public opinion given the financial constraints.

9.38 We believe it is desirable that the authority should have the maximum possible financial responsibility, given the constraint that finance will have to come from central Government. We therefore recommend that the authority should receive a single annual block grant. It would be responsible for deciding at the margin to what extent it was preferable to expend the available resources on subsidising public transport or on investment in new facilities, and for determining which were the priority areas for investment.

9.39 The question of ownership of, and operational responsibility for, public transport is important but, in our view, secondary. One possibility would be for the authority to act like the Passenger Transport Executives in the United Kingdom and acquire and operate its own bus services. It would be more difficult to take over the operation of the suburban rail service because of the problem of shared track facilities and the fact that suburban rolling stock is often also used for mainline services. In our view it would, however, be preferable for the Transport Authority to contract with CIE as the operating body responsible for both bus and train services. CIE would effectively operate as the

Transport Authority's agent offsetting the revenue it collected against its own costs and being paid any necessary additional subsidy or remitting any residual profit to the Transport Authority.

9.40 On the investment side, the Transport Authority would approve CIE's investment proposals in the Greater Dublin area, and would finance them. This could be accomplished by the Transport Authority making loans to CIE out of its block grant, though an alternative possibility, with the same practical effect, would be for central Government to make the necessary loans, but on the clear understanding that loans made would be offset against the authority's block grant.

9.41 We consider that central Government should take the initiative in establishing an organisational structure of the type described above. This would provide a much better basis for comprehensive and integrated control of transport planning in the Dublin region. Clearly, the most important change would lie in the devolution of some financial control and allocative responsibilities from central Government to the new authority and, through it, to the local authorities. This in turn would require a response at central Government level in that we do not consider it desirable for the authority to be reporting to both the Department of the Environment and the Department of Tourism and Transport, when its specific remit would be to run Dublin's transport system on an integrated basis. This is part of the case, developed elsewhere in this report, for giving a single Department all transport responsibilities.

9.42 It may be that these recommendations are considered too ambitious, and that Government will not be willing to accept the transfer of its responsibilities to the local authorities. In this case, we believe that, as an absolute minimum and much inferior solution, more intensive co-ordination arrangements should be established between CIE, the central Government and the local authorities in Greater Dublin.

Cork

9.43 The city of Cork suffers from the same transport problems as Dublin. While Cork's problems are smaller in scale, they are as intense

as those in Dublin, and surprisingly high levels of traffic congestion are experienced throughout a much greater period of the day than in many comparably sized cities in Britain. This appears to be largely due to the topographical limitations which concentrate an unusually high proportion of all through traffic movements into the confined area near the city centre. However, it also reflects Cork's importance not only as a port and industrial city but also as the principal regional shopping and administrative centre for a wide surrounding region.

9.44 A number of traffic management measures have been introduced to improve the flow of traffic and a scheme for area traffic control of all traffic light installations is currently being introduced. Further proposed traffic management schemes may create difficulties for the Gardaí who are reluctant to take on more traffic responsibilities given their other priorities and shortage of manpower. We regard it as vital that the road authorities should have prime responsibility for traffic management schemes. Though the Gardaí inevitably have effective powers of veto on such schemes, these powers should be used only sparingly, if at all.

9.45 A long-term transport land use plan for the Cork region has recently been prepared (22). The report sets out the proposed land use development strategy over the period to 1991, and also a recommended transport strategy to match the development policy. The plan contains "an interrelated set of proposals for improved public transport services, traffic management, new and improved roads and parking policy. It is not intended as an ultimate solution to transportation problems in Cork, but is designed as an investment policy to the 1990s to alleviate and contain the problems" (22). The road system in the plan is designed "to relieve existing problems while taking account of the projected growth in traffic. One of the major aims of the road investment, particularly in the City, is to provide extra capacity necessary to enable the policy of improving public transport and environmental conditions. Specific major road construction will provide improved access to major industrial areas in support of the land use plan." In the towns around Cork a number of schemes at a modest scale are recommended. The case for a major crossing of the River Lee

downstream of the City Centre was examined and "it was determined that such a facility would be required in 10-15 years' time, otherwise congestion levels in the centre and on the major radial roads would become intolerable in peak periods". The new road system would be supported by an extensive Area Traffic Control System which is considered to be "vital to the philosophy of the Plan". Bus priorities are also "an integral part of the traffic management system" whilst the plan "places strong emphasis on parking control in the City Centre".

9.46 The plan recommends a significant investment in public transport "as part of an integrated approach designed to alleviate traffic problems while avoiding expensive and environmentally disruptive new road construction in the urban area". The plan recommends a 20% increase in peak bus frequencies and a 15 per cent increase in off-peak frequencies. It is recommended that the existing suburban rail system to Cobh be maintained and the service to Middleton reintroduced. The detailed supporting analysis on which these conclusions must be based is not, however, included in the report.

9.47 It is clearly important that the strategy developed in the Cork Land Use Transportation Study is developed and implemented and that the exercise should be the first stage of a continuing planning process. The mistake in Dublin of not setting up an adequate body to implement the proposals of the transportation study must not be repeated in Cork. We have therefore considered whether it is necessary to set up a separate transport authority in Cork. We have, however, recommended against this. The present procedures for co-operation between the City and CIE appear to work reasonably well, and we see no advantage in recommending changes for their own sake. The scale of the transport problem in Cork, although considerable, is more easily manageable than that in Dublin. We would, however, recommend that the City Engineers' Department, suitably supplemented with public transport expertise, should be responsible on behalf of the local authorities for co-ordinating and monitoring development plans and proposals for both private and public transport within the Cork City region. CIE should be expected to discuss all proposed development with either the Cork City or Cork County Council depending upon the area being served.

Urban Cities

9.48 We have not examined in any detail the transport problems of the other smaller cities. In general these problems would appear to be mainly the following:—

- (a) intense but very limited congestion for a short time during peak periods;
- (b) the provision of adequate parking space particularly during the tourist season;
- (c) the provision of an adequate bus service at a reasonable cost.

9.49 The solutions to these problems within the available level of resources may be extremely difficult, particularly as so many Irish cities are located on river estuaries, with the consequent pressure for investment in large and expensive road bridges. While we recognise that, with continued traffic growth, the construction of estuarial crossings may be necessary from time to time, we consider it equally important that the cities concerned do not lose sight of other aspects of their traffic problems. Much congestion is caused by internal movements in the cities, and new bridges by themselves will do little for these even where geographical and financial circumstances permit their construction. The policies to be adopted will vary from city to city, dependent on local circumstances, and will not raise particular points of principle which can be discussed in a report of this nature. However, in general terms we would place considerable emphasis on traffic management, and the provision of adequate off-street parking coupled with selective small scale road improvements as the most effective means of improving traffic conditions for both private and public transport in the smaller towns.

CHAPTER 10

THE ORGANISATION OF THE TRANSPORT SECTOR

10.1 We were asked to consider the legislation and policies which inland transport operates in Ireland and to identify what in our view were the principles that should underlie a national transport policy. In the previous chapters we have examined some of the principal problems and policy options relevant to each of the main transport modes. However, each mode cannot be considered entirely in isolation. For example, the development of the roads programme and changes in policy on road transport will affect the finances of the railway. Conversely, policies designed to protect the railways, by restricting haulage or preventing the development of long distance inter-urban coach services or internal air services, will adversely affect the transport user by restricting his freedom of choice. The treatment of inter-urban competition and co-ordination must be a major element in any national transport policy.

10.2 In addition to these commercial problems, there are also various considerations of social policy. In Ireland, as in other countries, one of the objectives of transport policy should be to make transport as widely available as possible. Thus all communities are connected to the national network, and public transport.

10.3 The external effects of transport are also important and have to be considered carefully. The provision of adequate transport services is an essential element in regional development. Transport policy is also increasingly concerned with safety and environmental issues. All these issues may require Government monitoring and intervention.

10.4 We feel that in addition to the recent creation of the Transport Consultative Commission the Government should review the organisational arrangements for control of the transport sector, since the current arrangements, however satisfactory they may have been in the past, may not be sufficient to achieve the co-ordination of transport between modes required in the future. In particular we feel that the Government should carefully consider whether the following relationships are satisfactory:—

- (a) between CIE and central Government;
- (b) between the central Government and the other organisations responsible for transport in Dublin;
- (c) within central Government between the Department of Tourism and Transport and the Department of the Environment.

Relations between the Government and CIE

10.5 It has not been put to us by the representatives of CIE that they do not receive sufficient guidance from central Government as to the nature of the services that CIE should provide and the method that should be used to support unremunerative services that are considered to be socially necessary. While we appreciate that when CIE was profitable or making only comparatively small losses there was an argument, although in our judgement weaker than is often thought, for leaving so many essentially political decisions in its hands, we suggest that it is no longer appropriate where such large sums of public money are involved. We would advise that a framework be established in which Government undertakes the task of defining the social role of CIE, and gives CIE a stable environment within which to make the operational decisions.

10.6 We have discussed this problem at some length in the case of the railway, and more briefly in the case of inter-urban buses. In general terms we would suggest that the role of central Government should be as follows:—

- (a) to approve the overall level of investment by CIE in each of its separate services;
- (b) to define the social service role which it expects CIE to perform in areas where strictly commercial criteria would suggest that services should be curtailed or withdrawn;
- (c) to set medium-term financial targets for CIE businesses. For the railway, this will imply specifying an appropriate level of subvention rather than a rate of profit;
- (d) to provide guidelines for pricing and investment appraisal, consistent with (c) above, particularly in areas where CIE is given a social obligation; and
- (e) to monitor performance throughout the year to ensure that targets are being met.

10.7 On the other hand, we would suggest that central Government leaves it to CIE to:—

- (a) decide the appropriate level of its charges given (c) and (d) in the previous paragraph, though subject to any constraints which may be imposed by the role of the National Prices Commission;
- (b) take steps to run the business efficiently;
- (c) settle the details of its investment programme, though subject to Government approval of particularly large projects, and Government guidance as to the overall level of investment in any one year.

10.8 The discussion in Chapter 4 has shown that this is not the present procedure. Instead CIE has taken responsibility for setting its own financial objective, by deciding to maintain its losses constant at their 1975 level in real terms. Central Government has apparently accepted this objective by default rather than taking a positive role, for example, by deciding what level of subsidy it regards as correct for each service and paying this to CIE as an above the line payment for the social services it provides.

10.9 At the same time, Government has taken an interest in the detail of CIE's charges, and has intervened to restrain them as an

aspect of counter-inflation policy. Although the temptation to interfere with State enterprises in this way in times of rising prices is strong, it is apparent that the impact on CIE has been serious.

10.10 At the moment the procedures for reviewing CIE's investment proposals appear particularly unsatisfactory. No decision has been taken on the major proposal to construct a rapid transit line in Dublin, or on the proposal to electrify the line from Howth to Bray.* CIE's proposals for renewal of its passenger rolling stock have been delayed until decisions on the electrification of the Howth—Bray line are reached. At present our understanding is that there is no regular procedure by which CIE can plan its future investment policy with any confidence.

10.11 We consider in a subsequent section how far it is right for CIE to report to one Department of central Government whilst the provision of roads is the responsibility of a different Government Department. We would, however, advise that, whatever the final organisational structure, it is important that central Government should take a more explicit role in the determination of public transport policy. While in the short term it may sometimes be politically convenient to be able to give the responsibility to CIE, in the long term the Government will have to take a number of difficult strategic decisions. The present organisational structure whereby the Government acts as a reluctant and somewhat ungenerous paymaster, while trying to stay detached from the more important policy issues, will be difficult to maintain in the long term. The railway system in particular cannot be maintained and developed to meet the requirements of the late twentieth century unless the Government is willing to provide the necessary funds for replacement and renewal of life expired assets. It is true that the rail system may be able to continue for a number of years with only a low level of investment by deferring replacement and renewal expenditure, however, in the long run this only leads to a progressive deterioration in service, and requirements for yet greater investment.

*Since this was written, the Government announced (on 31 May 1979) that the Dublin suburban rail services from Howth to Bray would be electrified, at a cost of £46 million for the project.

Transport in the Greater Dublin Area

10.12 The second area where organisational changes seem to us to be needed is in Greater Dublin. The arrangements for providing transport services, both public and private, seem insufficiently co-ordinated, particularly between CIE and the local authorities. CIE is operating and charging users for the operation of bus and suburban rail services in the Greater Dublin area which clearly have an impact on land use and development patterns in the area. At the same time, the local authorities are responsible for land use planning and for the road system and the management of traffic on it. The way in which traffic is controlled will have a significant impact on the conditions in which CIE's buses operate. However, there are few formal relationships between CIE and the local authorities.

10.13 In Chapter 9 we suggested the creation of a Dublin Transport Authority, which would have financial and overall policy responsibility for the buses and suburban railways in Dublin. While such an organisation could take a number of forms, we would argue that it should have planning and operational responsibility for all Dublin's public transport. The proposed structure and responsibilities of the Authority are described in Chapter 9.

10.14 It will be particularly important that a satisfactory working relationship is established with the Gardaí. Because of the heavy burden of their other duties, it seems likely to us that the Gardaí will be unable to give parking control and traffic regulation the high and growing priority which it requires from the transport policy viewpoint. We feel there is a need to consider whether any change in existing arrangements, such as the direct employment by the Transport Authority of traffic wardens with enforcement powers, is feasible and would lead to firmer traffic management.

10.15 We believe that the arrangements discussed in Chapter 9 to give the local authorities in Dublin, through the Transport Authority, a financial and operational interest in public transport operations in their area are highly desirable. Thereafter, it may well be worthwhile

considering extending these arrangements to other urban areas. However, by virtue of their smaller size, the problems of these areas do not seem nearly as acute as those of Dublin.

Relations within Central Government

10.16 There are two principal features of the formulation of transport policy within central Government which we feel should be examined. The first is the relationship between the various Government Departments. Whatever the merit of the arrangements that have obtained in the past there are considerable drawbacks in dividing the responsibility for inland transport between the Department of Tourism and Transport and the Department of the Environment and we recommend that one Department should have sole responsibility for all aspects of inland transport. We appreciate that it is possible under present arrangements to co-ordinate the interests of the various central Departments on major proposals. Moreover, there will always be other Departments, in particular Economic Planning and Development, Finance and Labour, that will have an interest in transport policy so that the creation of a new single Department would not obviate the necessity, for example, to discuss transport issues at Cabinet level from time to time. But the need for co-ordination goes much further than this into policy, planning and continuous monitoring of performance. Investment in both public and private transport is designed to achieve the same objective of moving goods and passengers about the country more efficiently. As such, there is a need to appraise projects in these areas consistently and to assess them in competition with one another, especially given the scarcity of the funds available. We would suggest that there would be advantage in a single Minister having day-to-day responsibility for the resolution of conflicting investment priorities, and for ensuring consistency in pricing decisions.

10.17 The proposals made above for creating an integrated transportation authority in Dublin, responsible for both public and private transport, adds further weight to this suggestion. This authority would be responsible to the local authorities and hence, through them, to the Department of the Environment. This would give the Department of the Environment a more direct interest in public transport issues, for

which the Department of Tourism and Transport is formally responsible, than it has at present through its role in assessing local authorities' transportation studies.

10.18 We are aware that the Government has established a Transport Consultative Commission, to advise on all aspects of transport policy. We are sure this will have a valuable task to perform, advising on areas where the transport interests of the two Departments are potentially in conflict or in need of greater co-ordination. However, in our view, such an advisory body is no substitute for the necessary ongoing liaison on transport policy which can be established within a single Government Department.

10.19 Though we are convinced that a single Department is required, we find it less easy to advise on whether the new Department should be based on the Department of the Environment or the Department of Tourism and Transport. The most obvious course would be an enlargement of the Department of the Environment. This Department is responsible for the local authorities, who build the roads, and who will, if our proposals are carried out, have a greater interest in public transport. Regardless of future responsibilities, some relationship must be sustained with the local authorities on road building and maintenance. The resultant Department would, however, be extremely large, and in view of the importance of transport in the Irish economy (see Chapter 2) it might well be argued that transport is a sufficiently large area to merit the sole attention of a Minister. However, such considerations take us outside the province of transport policy. Therefore, we feel in no position to make a particular recommendation beyond suggesting that either alternative would be an improvement on the status quo.

10.20 The second main feature of the formulation of transport policy within central Government which we feel should be examined is the need to adopt more consistent and scientific approaches to the analysis and solution of transport problems. One aspect of this was discussed at some length in Chapter 6, in the context of the appraisal of road investment, but it is of general applicability. It would seem to us that now is the time to do more to quantify the consequences of particular pricing and investment decisions.

10.21 Within the present organisational structure we believe that investment appraisal procedures should be strengthened in both the Department of the Environment, the Department of Tourism and Transport and CIE. In the Department of the Environment's case the effects of new road schemes on journey times, accident rates and vehicle operating costs should be quantified as a matter of course as part of the process of deciding which schemes should have priority in the investment programme. The Department of Tourism and Transport should require CIE to show the commercial consequences of its investment plans on the basis of the intended pricing policy. Where they wish to undertake investments which are not commercially profitable, they should so far as possible quantify the social benefits and in any event give a more precise expression of the case for such social investment which will allow the Government to consider options.

10.22 Similarly, in determining its prices, it would be better if CIE did not pursue policies of general and conscious cross-subsidisation, but set prices by reference to cost. Services which make losses should be covered by Government subsidy if the Government believes their retention is socially worthwhile or should not be run at all.

10.23 Clearly, more scientific appraisal methods will require more data. Data collection is expensive, and not desirable for its own sake, but we do not believe the relevant authorities have enough factual information at present to determine their transport priorities correctly. The extra costs of collecting key statistics would more than justify itself through the improved allocation of available funds. For example, there are obvious hazards in trying to determine a policy towards freight transport when the last survey of the road freight sector was conducted in 1964. Similarly, it is far from easy to assess the time savings arising from new road schemes when no data are available at the national level on average vehicle occupancies. Nothing is worse than collecting an unnecessary amount of data which is never used; but we would suggest there are data which have been collected occasionally but which need to be more regularly updated.

10.24 CIE make considerable efforts to collect data on their activities and though it would be desirable for more to be published, we have

little criticism to make of them in this regard. But Government devotes insufficient resources to collecting information on developments in the private sector. It shows even less inclination to publish. Traffic count information is regarded as confidential as is the *Road Needs Study*, notwithstanding the fact that they are major factors in determining a large public investment programme. We believe that more data, and more made publicly available, could lead to significant improvements in transport policy, and in the quality of public debate on transport questions.

Conclusion

10.25 Our recommendations in this report are far reaching. Their implementation would require major organisational, administrative and legislative changes in central and local Government, in CIE and in the private sector. They will not, and indeed should not, be accepted without considerable further deliberation. But we have argued that the problems of Irish transport policy are substantial and need full and frank discussion. A root and branch rethinking of policy, with all options considered, might well be a good point of entry into the 1980s.

declined slightly. CIE is also the largest licensed road haulier. However, the most significant aspect of road haulage in Ireland is the high proportion of own account operations. The Confederation of Irish Industry has suggested that 90% of road freight traffic is carried by own account hauliers.

Chapter 3: The Organisation of the Transport Sector

11.6 Within central Government two Departments have a direct interest in transport. The Department of Transport and Tourism is responsible for overseeing CIE, and for the formulation and development of transport policy as it affects the railways, road freight and public road passenger services. The Department of the Environment is responsible for the central administration of the public roads, including the supervision and assistance of the local road authorities. The Department gives 100% grants to the counties for work on the improvement and upkeep of the national primary and secondary roads.

11.7 A number of other central and local Government bodies have some responsibility for transport including the Department of Finance, the Department of Economic Planning and Development, the Department of Justice, the Department of Labour, the Gardaí, An Foras Forbartha and the local authorities. CIE is a State-owned body responsible for the operation of the railway system, the bus services in Dublin and in the provinces and the country's largest road freight business.

Chapter 4: The Railway System

11.8 CIE have a general policy of operating other parts of their organisation as complementary to the railway.

11.9 Irish railways have been losing money for many years. Since 1958 successive Transport Acts have recognised the need for the payment of a Government subvention. The past decade has witnessed a sharp and progressive deterioration in the railway's financial position. By 1977 the railway deficit was £27.4 million, which exceeded railway receipts of £25.6 million. By any standards the rail services are now heavily subsidised.

CHAPTER 11

SUMMARY OF MAIN CONCLUSIONS

11.1 In this chapter we summarise our main conclusions and recommendations. Each chapter is considered in turn.

Chapter 2: Transport in the Irish Economy

11.2 Total annual investment in transport in Ireland probably exceeds 7% of GNP. Current expenditure is even greater. In total we estimate that in 1977 current and capital resources consumed by the transport sector amounted to some 16% of GNP. Transport is clearly one of the most important components of the whole Irish economy.

11.3 The annual Household Budget Survey for 1976 showed that 11.1% of total expenditure was directly accounted for by transport. Private transport accounts for almost ten times as much household expenditure as public transport. Within the public transport sector the bus is more important than the train, accounting for about four times as much expenditure.

11.4 The private car is the dominant mode of travel and the mode of travel whose use is growing. Public transport utilisation is static. Whilst long distance scheduled bus services and, to a lesser extent, the railways have experienced some growth in demand, there has been a fall in the use made of the city bus services.

11.5 It is extremely difficult to obtain a coherent picture of the current pattern of freight transport activity. There has been no comprehensive survey of road freight since 1964. In 1964 it was estimated that CIE rail operations accounted for 16.6% of freight ton mileage. Since then it is likely that rail's share of the market has

11.10 Since 1974, CIE has been compensated for its losses on the railway within a framework of regulations laid down by the EEC.

11.11 Ireland has the least used railways in the EEC.

11.12 CIE has done much in recent years to improve the efficiency of its rail operations, including a major reorganisation of its freight sundries services. As a result, CIE aim to reduce the railway deficit from 51% of total costs in 1976 to 38% in 1980.

11.13 We consider that three factors, the cost of asset replacement, the high labour intensity of the railways and growing competition from cars and road freight transport will in the long run make it increasingly difficult to maintain any fixed financial target.

11.14 We doubt the extent to which CIE can make major financial savings by further increases in productivity. Within the constraints of railway technology, and bearing in mind the type of traffic for which railways are suitable, we believe CIE has a far from inefficient organisation. In the very recent past, it has substantially trimmed its labour force and undertaken many economies.

11.15 We do not believe it is possible to bring about a major improvement in the financial position of the railways by major new investment, since substantial extra revenue would be required to service the additional capital changes and this is unlikely to materialise.

11.16 Charging higher rates and fares probably would lead to an improvement in the railway's financial viability but there is little prospect that higher rates and fares alone would enable the railway to cover its costs, even if the increases were politically acceptable.

11.17 Any further policy of route closure is likely to lead to only a small improvement in railway finances. With the possible exception of one or two minor non-radial routes, the Irish rail system has now been rationalised close to its minimum effective working size.

11.18 There is no chance of a financially viable railway system, and in the long run it will be increasingly difficult to maintain the deficit at its current level.

11.19 The main social arguments for the rail system are discussed in paragraphs 4.33 to 4.66 of this Report. We would argue that none are so overwhelming that the Irish people should not consider carefully if these are sufficient to justify the high financial costs of retaining the rail system. Whilst it would be wrong for any final decision to be taken without more detailed examination of the options than we have been able to give, we are convinced that there is a *prima facie* case for further investigation of the merits of retaining or abandoning the rail system.

11.20 We therefore suggest that the Government in conjunction with CIE should carry out a major review of the prospects for the railway industry. On completion of the proposed review the Government should set out a clear policy decision on the future of the railway, the social role it is to perform and on how it is to be judged successful in performing such a role.

11.21 We suggest that a different administration and financial framework may well be required to help the Government in taking the necessary policy decisions about the social value of the railways in relation to the service provided. We believe that the first priority is for Government to advise CIE publicly on four points:

- (a) how much of the existing rail network is required to be retained for social reasons;
- (b) what is the minimum standard of passenger service required in terms of frequency and speed;
- (c) which specific bulk freight movements should the railways be expected to handle, and what should be its competitive policy towards other freight traffic;
- (d) how much the Government is willing to pay CIE to continue to provide these services.

The railway should be free to augment services above the minimum level set down by the Government where this can be shown to be financially profitable.

11.22 CIE should still be required to provide a nationwide parcels and sundries service.

11.23 CIE should submit an annual corporate plan to the Government. The plan would cover a period of about five years and would cover such items as any amendments that CIE proposed to its social remit, investment intentions, planned developments in operational and charging policy and the progress which CIE has made in meeting the objectives set out in earlier plans. A summary of the plan would be published. Government would be involved in discussions leading up to the plan, and would eventually be required to approve it, subject to any reservations it might have. As part of the approval process, the Department would sanction CIE's planned investment for the following year. The Government would also give formal approval of the level of grant payment for the next year.

11.24 The payment arrangement for the agreed level of grant should be such that CIE received the money as an "above the line" sum in its accounts, so that it is counted with the revenue from rates and fares when compiling the railway working account. Thereafter CIE should have to break even on its rail operations.

11.25 Major investment proposals should be explicitly identified in CIE's corporate plan, with appropriate justification. The procedures that might be adopted by CIE and Government for the presentation and approval of investment proposals are set out in paragraphs 4.88 to 4.92 of this report.

Chapter 5: Inter-Urban and Rural Bus Services

11.26 The majority of inter-urban and rural bus services are operated by CIE. A number of private bus operators also provide services, under licence from the Department of Tourism and Transport, on routes which are not served by CIE.

11.27 We regard the development of Expressway bus services as wholly desirable and commendable.

11.28 The Government ought to consider further its attitude towards the subsidisation of rural bus services. At present CIE is in the aggregate close to break even on bus services outside Dublin. However, this overall picture conceals losses on some routes which are covered by profits on others. Where a bus service is being operated for social service reasons, the decision to subsidise it is one for Government to take rather than CIE. The finance to subsidise it should come from Government rather than from the profits on other bus routes.

11.29 The Government should develop a specific policy for the provision of public transport services in rural areas. Rather than attempt to provide expensive and probably little used conventional bus services it may be better to adapt and build on other transport already available in the area.

11.30 The potential for private bus operators to provide rural transport more cheaply than CIE should be examined.

Chapter 6: Roads

11.31 There are conflicting calls on the public expenditure available for the road system, between the maintenance of an extensive network of minor roads, and the improvement of major links where demand is concentrated. Expenditure on roads, in real terms, has risen very little since the mid-1960s and the percentage of GNP devoted to the road system fell from 1.5% in 1966 to 1.1% in 1976.

11.32 The Government is now considering allocating more resources to the improvement of the primary network. The recent green paper on 'Development for Full Employment' suggested that double the present level of spending on road improvement could be put to good use by 1980. We believe that this increased spending is justified although the evidence available to us is incomplete. We are less certain that it is realistic to endeavour to achieve this expenditure level by 1980. If expenditure on road building is increased too fast there is a significant risk of bidding up road building costs because of supply shortages in this part of the construction sector.

11.33 The availability of more funds for highway investment ought to be accompanied by a more systematic appraisal of the routes on which the money is spent. A systematic procedure for the comparative analysis of the costs and benefits of proposed road development schemes should be introduced.

11.34 The possibility of reducing expenditure on improvement and maintenance of minor roads to help finance the development programme for the major roads should be considered.

11.35 Tax payments by road users, on any reasonable basis of calculation, far exceed the level of expenditure incurred for their benefit. Increased expenditure on roads should not necessarily be financed by increased taxation on road users. We would not recommend introducing toll roads.

Chapter 7: Road Haulage

11.36 Own account hauliers may have carried as much as 90% of the road freight tonnage in Ireland. This is a very much higher percentage than found in other countries of the EEC. Industrialists have complained that the licensed road haulage sector is too small to meet their needs.

11.37 The number of general haulage licences has been restricted since the 1930s, although the number of lorries that could be operated was increased by a factor of six as a result of the 1978 Transport Act. No one haulier may operate more than 80 vehicles. Lorries of less than 2½ tonnes unladen weight, the carriage of certain agricultural commodities at harvest time, and the operation of vehicles restricted to a limited radius from specific urban centres are exempt from the licensing requirements. CIE is the only road freight operator not subject to these restrictive arrangements.

11.38 The present quantitative controls should be removed and replaced by qualitative controls. We would expect liberalisation to lead to a reduction in own account fleets and to companies making greater use of hauliers, especially for any peaks in traffic they handle. We would not expect it to lead to either excessive concentration or excessive competition in the industry.

11.39 Qualitative controls on the road haulage industry are having to be developed as a result of EEC directives. These cover the qualification of individuals wishing to enter the haulage profession, the testing of vehicles for safety purposes, and the permitted working hours of lorry drivers. We would urge the Irish Government to develop a complete policy on quality regulations of road goods vehicles, over and above the EEC requirements, both at the legislative level and in the field of enforcement.

11.40 In 1974, CIE were informed by Government that road freight services should at least break even financially. As a result, services have contracted in recent years. They broke even financially in 1976 and 1977.

11.41 It has been suggested by the National Prices Commission and the McKinsey Report that CIE's road freight operations should be run as a separate organisation and allowed to compete for traffic currently carried by rail. We do not think it would be reasonable to expect CIE to operate separate road and rail freight businesses competing with each other.

11.42 We have considered the option of setting up a new State corporation distinct from CIE to take over and operate CIE's road freight services. We believe that this would be the quickest route by which Ireland could obtain a high quality national contract haulier, building on the size and experience of the existing CIE road haulage operations. Nevertheless, after giving this matter considerable thought we have concluded that the potential costs of any reorganisation would outweigh the advantages and that on balance it is better to continue with the existing pattern of operations. In particular we feel that it is important that CIE should be given a period of time in which to consolidate the potential gains from the recently completed reorganisation of freight sundries movement.

Chapter 8: Civil Aviation

11.43 The potential for internal air services in Ireland is limited because of the short distances involved. Some internal services that have been authorised have been dropped because of lack of traffic.

11.44 It is Government policy to encourage the development of internal services, and this should continue. Technical developments and rising levels of economic activity may well improve the viability of air commuter and air taxi services, and we believe it would be mistaken to restrict this development as a means of protecting the railway. We would not, however, recommend Government subsidisation of internal air services.

Chapter 9: Urban Transport

11.45 Traffic congestion in Dublin is an increasing problem. CIE have estimated that as a result of rising congestion average bus speeds in central Dublin halved between 1970 and 1977.

11.46 At present Dublin's bus and suburban rail services both lose money. It has recently been estimated that the suburban railway system was losing over £3 million a year or 37p per passenger journey. In the early 1970s the Dublin bus services were breaking even. However, between 1972 and 1974 there was a rapid decline into unprofitability. In large part this was due to the policy of the Irish Government, including the National Prices Commission, in deferring or refusing to grant adequate fare increases. In 1977 the deficit on the Dublin City bus services was equal to 17% of receipts and amounted to 2½p per passenger journey.

11.47 The responsibilities for planning and operating the transport system in Dublin are divided between a number of organisations. The one significant effort to develop a co-ordinated transport and planning strategy for Dublin was the Dublin Transportation Study. This was carried out in 1970/71. However, when it was completed, the study team was broken up, and their recommendation that a co-ordinating committee should be created to direct the implementation of the proposed transport programme and continue the planning process was not implemented.

11.48 The Dublin Transportation Study put forward proposals for investment in new highways and public transport. A subsequent study investigated the potential for a rapid transit system in Dublin. There has

been only limited progress towards implementing the road development programme. Although the work on the Dublin rapid transit system was completed in 1976 the Government has still not given a decision on the project. At the moment land use planning in the city is in abeyance, awaiting a decision on this project.

11.49 Although the Dublin rapid transit system is attractive and according to the consultants' report economically viable, it would be costly. This raises difficult issues of priority, given other demands for finance both within and outside the transport sector, since the scheme would only serve limited corridors of the City of Dublin.

11.50 Intensified parking controls and better enforcement procedures will be needed to prevent congestion in Dublin reaching intolerable levels.

11.51 More bus priority schemes and bus lanes should be provided in Dublin.

11.52 One of the reasons why so little progress has been made with the control and organisation of transport in Dublin is organisational. A co-ordinated transport policy for the Dublin area must be developed and implemented. The present situation with several Departments, local authorities and State sponsored bodies all responsible for particular aspects of transport, but with no overall controlling organisation, is clearly unsatisfactory. A unified Transport Authority, with representatives from central and local Government, should be established covering all modes of transport in the Dublin area. The Authority would be responsible for investment, pricing and regulatory policies for roads, trains and buses.

11.53 The Transport Authority should be financed by a single annual block grant from central Government. It would be responsible for deciding to what extent it was preferable to expend the available resources on subsidising public transport or on investment in new facilities.

11.54 The Transport Authority would contract with CIE which would be retained as the operating body responsible for providing bus and train services. CIE would operate as the Transport Authority's agent offsetting the revenue it collected against its own costs and being paid any necessary additional subsidy or remitting any residual profit to the Transport Authority.

11.55 A long term transport and land use plan for the Cork region has recently been completed. It is clearly important that the strategy developed in the Cork Study is developed and implemented. The local authorities in the region acting through the City Engineer's Department should be responsible for co-ordinating and monitoring development plans and proposals for both private and public transport within the Cork City region.

Chapter 10: Organisation of the Transport Sector

11.56 The treatment of intermodal competition and co-ordination must be a major element in any national transport policy. The Government should review the organisational arrangements for control of the transport sector.

11.57 The Government should take a more positive role in determining the services that CIE should provide and the method that should be used to support unremunerative services that are considered to be socially necessary.

11.58 The procedures for reviewing CIE's investment proposals needs to be reviewed. Central Government should take a more explicit role in the determination of public transport policy. The present organisational structure whereby the Government acts as a reluctant and somewhat ungenerous paymaster whilst trying to stay detached from the more important policy issues will be difficult to maintain in the long term. The railway system cannot be maintained and developed unless the Government is willing to provide the necessary funds for replacement and renewal of life expired assets.

11.59 The arrangements for providing public and private transport services in the Greater Dublin area are insufficiently co-ordinated particularly between CIE and the local authorities. In Chapter 9 we suggest that a Dublin Transport Authority should be created. This would have financial and overall policy responsibility for the road system and for the buses and suburban railways in Dublin.

11.60 There are considerable disadvantages in dividing the responsibility for inland transport between the Department of Tourism and Transport and the Department of the Environment. One Department should have sole responsibility for all aspects of inland transport.

11.61 There is a need to adopt more consistent and scientific approaches to the analysis and solution of transport problems. Investment appraisal procedures should be strengthened. More scientific appraisal methods will require more data. We do not believe that the relevant authorities always have enough factual information at present to determine their transport priorities correctly. More data, and more data made publicly available, could lead to significant improvements in transport policy, and in the quality of public debate on transport questions.

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ANNEX

Energy Use in Rail and Road Transport

The purpose of this annex is to examine and provide a very preliminary estimate of the effects on total energy costs in transport that might arise from the closure of CIE rail services. It is not intended to be definitive and the methodology used is highly simplified compared to that required in a full appraisal. Nevertheless, it does indicate the lines along which methodology could be developed.

The study is based on 1977, the latest year for which full data are available. In that year, CIE rail services carried 364,739,000 tons miles of freight traffic, and 542,289,000 passenger miles of passenger traffic. In the process, fuel costs of £2,652,608 were incurred as stated in CIE's accounts. We understand that these costs include little if any taxes, including VAT.

To estimate what energy costs would have been if the traffic travelled by road, it is necessary to make assumptions about the alternative services that would be used, and the load factors that would be achieved on these services. There is clearly considerable scope for debate on appropriate assumptions. Figures are also required on fuel consumption by the vehicles considered, and on fuel costs.

Freight Traffic

Most CIE freight traffic is now concentrated in the bulk sector of the market. The most important sectors are ale, beer and stout; beet and beet pulp; cement; fertiliser; mineral ores; and petrol and oil. Between them these commodities accounted for almost 75% of CIE's total tonnage of rail freight in 1977. On the other hand, CIE is also engaged

in substantial carryings of general freight including sundries. The type of road vehicles to which this traffic might transfer would clearly vary from commodity to commodity. The bulk traffic could be expected to travel in large lorries, up to the legal limit of 32 tons gross vehicle weight. Sundry traffic would, on the other hand, be likely to transfer to much smaller vehicles. For the purposes of this study, we will make an average assumption that all traffic would transfer to a 20-ton gross vehicle weight lorry, operating with a twelve ton payload.

Two further items of data are required to translate these figures into an estimate of vehicle mileage. Firstly, it is necessary to make an assumption about the ton mileage of traffic that would be required by road. This is virtually certain to be less than the rail figure because of the greater flexibility available in route choice. Feeder legs to railheads are not necessary, and these may well be in the "wrong" direction from the viewpoint of the overall movement of the freight consignments. Similarly, it will not be necessary to route traffic through Dublin, as so often happens on the railway. We assume that a 15% saving on total ton mileage can be achieved.

Secondly, an assumption is required on the potential for backloading, so as to estimate the empty vehicle movements required. We have discussed backloading in Chapter 6, and concluded that the potential for it in Ireland is poor. We therefore adopt a backloading assumption that 20% of total traffic is carried in movements where the lorry is laden in both directions. For the remaining 80% an empty vehicle movement is required.

On this basis, there is a requirement for 46.5 million vehicle miles of lorry movements. A reasonable assumed fuel consumption for such a vehicle is 10 miles per gallon of diesel. Thus, an extra 4.65 million gallons of fuel are required. In 1977, diesel prices were 69.3p at pump and 53.0p for bulk purchases. These included 10% VAT and 17.7p excise duty. For the type of traffic being considered here, we may assume that virtually all diesel fuel will be purchased in bulk. Moreover, the tax component must be eliminated to render the figures comparable with those for the railway. We therefore use a cost per gallon figure of 32p for diesel fuel. Hence, the total energy costs of carrying freight traffic displaced from rail are roughly £1.5 million.

Passenger Traffic

The passenger traffic currently carried by rail could be expected to divert to both the private car and the bus if rail services were no longer available.

The potential for diversion to the private car is limited by the availability of vehicles to households. The 1976 Household Budget Survey revealed that less than half the households in urban areas had cars. Though ownership levels have risen significantly since then, it is still likely that almost half Ireland's households do not have a car. Even where cars are available to a household, they may not be available to current rail travellers, either because they are not qualified to drive, or because the vehicle is already being used by another member of the family. Moreover, for certain journeys in or to urban areas, the car may not be a feasible alternative to the train even when it is available because of difficulties over parking.

We therefore assume that 20% of rail passenger mileage would divert to the private car if rail services were not available. The remaining 80% of traffic is assumed to divert to buses. Some of these bus operations will be in urban areas, where traffic is diverted from commuter services in Dublin, Cork/Cobh and to a much more limited extent in the other urban areas. The scope of urban rail operations is limited; for example, in 1977 the Dublin suburban services accounted for well under 10% of total rail passenger receipts. Thus, by far the greater proportion of travellers will be diverting to rural bus services. For this study, we have assumed that 15% of total passengers divert to urban bus services and 65% to rural bus services.

As with freight traffic, the total passenger mileage required with road services is likely to be less than for rail because of greater route flexibility. The potential saving is perhaps slightly smaller here because lengthy time delays arising from indirect routings are more likely to be unacceptable to passenger traffic than for freight. We therefore assume a reduction of 10% in total passenger mileage. Thus, the total additional passenger mileage by road, and its allocation by mode of transport is as follows:—

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Mode	Passenger miles (million)
Private car	98
Urban bus	73
Rural bus	317

The load factors we have assumed to convert these estimates to vehicle miles are 1.8 for the private car, 30 for the urban bus and 25 for the rural bus. In so far as private cars are concerned, there is no average estimate available for long distance travel in Ireland. A figure of 1.8 is reasonable on the basis of experience in the United Kingdom. For the buses, we have taken as our starting point the load factors achieved on CIE rail services, which were about 135 passenger miles per laden train mile in 1977. For capacity reasons it would be quite unrealistic to assume a similar load factor for buses. However, it would be equally unrealistic to use the load factors currently achieved on buses as guide since the railway is now only operating on the more heavily trafficked routes, where the prospects for high load factors on buses are best. Ultimately, both the load factors and the energy consumed will be dependent on a policy decision on the frequency of the bus services provided, and the assumption we have used presupposes a more than fourfold increase in service frequency compared to that currently provided on the railway.

The average fuel consumption we have used for the private car is 28 miles per gallon of petrol. In 1977, the average pump price of petrol was about 95p, including 10% VAT and 43.4p excise duty. We have therefore used a tax exclusive price of 43p a gallon to calculate costs. On this basis, the energy costs of the extra car mileage is roughly £850,000.

For buses, we have used an assumption of eight miles per gallon of diesel fuel as a realistic estimate for both rural and urban areas. The costs figures are calculated on the assumption that all buses operate on diesel costing 32p per gallon in 1977, exclusive of tax, as for freight vehicles. On this basis, the energy cost for urban services is £100,000 and for rural services £500,000.

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On the figures used, we therefore obtain the following total cost estimates for replacement road services:—

	Energy Cost (£000)
Freight traffic	1,500
Private Cars	850
Urban buses	100
Rural buses	500
TOTAL	2,950

This cost of £2.95 million may be compared with the £2.65 million energy costs of rail operations in 1977. Thus, the increased energy costs amount to £300,000, or just over 10% of the 1977 energy costs incurred on CIE railways.

The assumptions used in this analysis are obviously open to debate. However, in our opinion, they are not unreasonable, and they do illustrate that the case for the railway as a conserver of energy is weaker than is often thought. Amendments to the assumptions made would clearly produce different results. In particular, the energy case for the railway is weakened if there are substantial opportunities for carrying passenger and freight traffic on existing services, if the potential for using large lorries is greater than we have assumed or if higher load factors can be achieved on public transport. On the other hand, the energy case for the railway is strengthened if substantially greater amounts of passenger and freight traffic divert to small vehicles such as cars and light vans, or if more pessimistic assumptions on lorry load factors are adopted.

COMMENTS BY P. MURPHY (IEC).

1. These comments relate to the Consultants' study in Part II of this Report.
2. I agree that, as indicated in paragraph 2.11 of the study, accurate information is not available about the road freight market shares of the different categories of operators. The available evidence would not, however, support the suggestion in paragraph 2.15 that 90 per cent of road freight traffic is carried by own account operators. This is important because in addition to being an apparent overstatement of the market share, a figure of 90 per cent assumes a certain significance in the context of a study like this.

The available contrary evidence is:

- (a) The market share of 83 per cent for own account operators quoted in paragraph 2.12 and taken from the 1964 Road Freight Survey cannot validly be quoted in the context of this study without qualification, because as stated on page 7 of the 1964 Survey Report:

—all hacker vehicles and

—all vehicles whether operated by hackers, licensed hauliers, or own account and not exceeding 2 tons unladen weight, were included in the own account category.

"Hackers" like licensed hauliers are operators for reward but are confined to certain areas. They are not own account operators i.e. firms carrying their own goods in their own vehicles. The Arthur Anderson Report, referred to in paragraph 2.12, stated on page 29, "It is likely that hackers had a significant share of the 83% because the main areas of hacker activity are in Cork and Dublin, which together have a

large proportion of national industrial output. In 1966, the two counties together produced some 47% of total national output".

- (b) In the Arthur Anderson study which is referred to in paragraph 2.12 and related to the year 1972 the estimated percentage market shares were:

Own account	62
Licensed Hauliers	16
CIE road	13
Hackers	9

- (c) Some indication of possible market shares in 1978 between own account operators and operators for reward (licensed hauliers, CIE and hackers) can be derived from vehicle statistics published by the Department of the Environment in the "Return showing numbers of mechanically propelled road vehicles of each class under licence, 30th September, 1978".

The statistics show that there were 52,366 goods vehicles in the "own account" category and 6,595 in the "carriage for reward" category or proportions of 89 and 11 per cent. However, the unladen weights — and presumably, therefore, the carrying capacities — of the "carriage for reward" vehicles were higher. The median unladen weight of the "carriage for reward" vehicles was about 4½ tons and of the "own account" vehicles about 1½ tons. Weighting by this factor of 3 to 1 would indicate the following shares:

Own account	73%
Carriage for reward	27%

Furthermore, vehicles licensed to carry for reward have greater opportunities for two-way loading — a point made later in the study — and if account is taken of this factor, the actual "own account" share of the road freight market should, on the basis of the analysis above, be less than 70%.

The figure of 90% is also quoted in paragraph 11.5 of the study. 65% would seem to be a more appropriate figure.

3. The section of the study dealing with the social case for railways — paragraphs 4.31 to 4.71 — is, in my view, unsatisfactory and falls short of what could reasonably be expected in a study "to identify the principles which should underlie a national inland transport policy". Many unsubstantiated statements and opinions are put forward, some apparently valid, others questionable and a number inaccurate. The analysis on energy use, even though it is stated to be tentative, is unnecessarily defective.

Overall, it is difficult to resist the impression that the analysis in this whole section was moulded to fit a certain conclusion.

On these grounds, I could not agree that the case indicated in the implied conclusion is made for closing most or all of the railway system. I say implied conclusion having considered what is meant by statements like, "But we are convinced that there is a *prima facie* case for fuller investigation of closing all or most of the rail system, and in the process abandoning the policy of having a national rail system" (paragraph 4.68). Does this mean that the railways should be given a fair trial before they are hanged? Or does it mean that they should be progressively hanged while they are being given a fair trial?

4. It would be impossible, within a reasonable compass, to set out all the comments and questions which arise on the content and tenor of the consultants' analysis in this section of the study but I feel the comments in the following paragraphs justify my view that the analysis is unsatisfactory.

5. Most of the arguments usually made in favour of railways are quoted. There are, however, at least, four other arguments which are commonly advanced which are not referred to or only partially referred to under other headings.

- Economy in land use; briefly that the railway facilities required for given (heavy) traffic movements take up less space than roads.
- Flexibility in carrying capacity: with the higher speeds and the greater discipline in traffic movement possible on the railway, it can adjust more readily and within wider limits than road

transport to meet seasonal and peak movements, including unpredictable or emergency movements. As an example, and in relation to passenger movement, one part of this argument is that a railway coach can take a much higher proportion of standing passengers than a bus and with greater safety and, at least, less discomfort.

—Capacity for technological development: railway transport with an independent, dedicated track, heavier traction units and a unified discipline of traffic movements, has greater scope than road transport for improvements in technology, such as the application of a wide range of power sources, new traction methods and automation.

—Lower vulnerability to bad weather: the bad weather “floor” for railway traffic is lower than for road traffic and railway operations can continue more or less normally in weather conditions which can disrupt road traffic.

6. Paragraph 4.67 states, “Elsewhere in the world freight railways, but seldom passenger railways, are capable of being run profitably” A reasonable interpretation of “elsewhere” as used in this statement is “everywhere else” but at least it must be taken as meaning “in many other countries”. In any event, the statement needs substantiation, recognising that like for like comparisons are difficult to make and involve a number of problems including those of identifying subventions and other similar payments and where these are included in railway accounts. Earlier, in paragraph 4.11 of the study, it is stated “Railways are unprofitable in most countries in the Western world, though international comparisons of financial performance are rendered virtually impossible by long term differences between countries in capital structure and other financial arrangements”.

7. A number of the assumptions, comparisons, and bases of calculation in the parts of the study dealing with energy conservation — paragraphs 4.55 to 4.61 and Annex — are questionable or incorrect.

8. In paragraph 4.57 the fuel consumption of a bus is quoted (71K cal. per seat Km) and is stated to compare very favourably with the fast train figure (72K cal. per seat Km). The latter figure is for a train travelling at 200 Km, or 125 miles per hour (para. 4.56). The bus speed is not quoted but it is unlikely to be higher than 50 or at most 60 m.p.h. The fact that fuel consumption per mile rises at higher speeds is ignored.

9. In the Annex, a 12 ton payload is assumed for alternative road transport. The average wagon load for CIE rail freight in 1977 as given on page 39 of the CIE Annual Report was 9.38 tons. It is more arguable that a lower figure than this should be assumed for alternative road transport rather than a higher figure because the rail freight fleet includes vehicles ranging up to 50 tons *carrying capacity*, or considerably more than the permitted *gross laden weight* of 32 tons for road vehicles. However, if the figure of 9.38 tons was assumed as the payload for alternative road transport, the estimated road fuel cost would be £1.9 million instead of the £1.5 million quoted in the Annex.

10. The assumption in the Annex that there would be a saving of 15% in total ton mileage on the transfer of rail traffic to road is questionable and so also is the similar assumption of a saving of 10% in rail passenger miles. On the freight side, no contribution to the 15% could arise at one or both ends from the substantial proportion of bulk traffics which pass to, from or between private sidings; little or no contribution could arise from traffic originating within or beyond cities or towns served by rail, or from longer rail than road hauls between the main centres — and these account for most rail traffic — because rail distances between these centres are much the same as road distances. The factor mentioned in the Annex about routing traffic through Dublin is not clear but on the standard basis for calculating rail ton miles the distance factor is not adjusted where traffic is sent by a longer route. Therefore, to give a 15% average saving, some traffic — of the order of 25% of present total rail traffic — would have to show a much higher saving — of the order of 40% — and this would have to arise in the main from the “wrong direction” factor referred to in the Annex. The average length of haul for rail freight traffic is about 100 miles (ton

miles divided by tons carried, page 33 CIE Annual Report 1977). So for about 25% of present rail traffic, unlikely situations on the following lines emerge from the assumption in the Annex:

- that traffic is sent 20 miles by road to a railhead in the opposite direction to its destination; sent 100 miles by rail, 20 miles past its destination and then returned by road to its destination.
- that traffic is sent 100 miles by rail, 40 miles past its destination, passing, on the way, through one or more rail freight stations more convenient to its destination and returned by road to its destination.

11. Similar kinds of possibilities arise from the assumption of a saving of 10% in rail passenger mileage. Factors which would operate in the reverse direction i.e. which would result in a higher road fuel estimate are not taken account of in the Annex calculations:

- The average length of journey for mainline rail passengers is about 80 miles (from the statistics, page 38 CIE Annual Report 1977). Substitute bus services would, therefore, be likely to be mainly express services, taking direct routes and making few stops. They would, consequently, be subject to some of the elements of inflexibility and "wrong direction" travel assumed in the Annex for rail services.

- Similarly some of these elements would arise in substitute road freight services because it is probable that part of the present rail traffic would be trunk hauled to central depots for distribution by other vehicles (for reasons of economy, including grouping of traffic from various origins for delivery, and because of limitations on driving hours).

- There is an implicit assumption in the calculations in the Annex that substitute road services would incur no mileage, and would use no fuel, other than on service — all vehicles would start and finish where ton miles or passenger miles commence or end. Mileage run for servicing, garaging and maintenance is not taken into the reckoning. More importantly, it is inherent in the calculations that vehicles would always be located and have finished a service at the point where demands arise — an unreal situation in the operation of a public transport service.

12. The Annex study of fuel costs for road services to replace rail passenger services omits any provision for traffic other than passengers carried on passenger trains. The revenue from this "other traffic", which would include mails and perishable and other goods requiring a fast service, was £2.5 million in 1977 (CIE Annual Report 1977, pages 17 and 38). This was equivalent to about 25% of rail freight revenue but the fuel cost for substitute road services for this traffic should, presumably, be higher than 25% (£500,000) of the corresponding cost for rail freight.

13. It is assumed that if the railways were closed all passengers would transfer to road transport. The likelihood of transfers to air transport and the resultant effect in terms of energy costs are ignored.

14. The consultants' estimate of the increased energy costs — £300,000 or 10% of the 1977 energy costs on CIE railways — if road transport replaced the railways is, therefore, a gross understatement of the potential cost.

Wt.— P127015. 2,500. 11/79. Cahill. (640). G.Sp.

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