The Community Workers Co-operative has prepared this report as a submission to the Dublin Transportation Review Group, and also as a resource to people active in communities around transport issues. It looks at the background to the current transportation crisis in Dublin, analyses the issues involved, sets out critical principles for future planning, and proposed immediate steps to address the situation. At the core of its proposals are demands for real involvement of transport users, community and interest groups in the planning and running of the Dublin transportation system.

WHY ARE WE WAITING?

- DUBLIN TRANSPORT FOR ALL -

A Publication of the Community Workers Co-operative
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Contents

Foreword

The Community Workers Co-operative has prepared this report as a submission to the Dublin Transportation Review Group, and also as a resource to people active in communities around transportation issues. The Community Workers Co-operative is a national network organisation of people working at local community level. Members belong to a wide variety of voluntary and statutory organisations which are directly involved in activities associated with job creation, training, education, health care, and the environment. Many members are involved with specialist activities associated with specific groups such as the unemployed, the disabled, travellers, women and the elderly. It is out of this experience of direct work at community level that this submission is made.

The Document is the product of research work carried out by Nexus Co-operative, of discussion between representatives of various Dublin based community groups, and of consultation with a number of individuals who have developed a specific expertise in the field of transportation. The Community Workers Co-operative acknowledges in particular the contribution of Nexus, especially Eoin Collins, in drawing up this submission and in providing research and resource support. The contribution of the Combat Poverty Agency towards funding research and publication costs was equally a vital factor in the preparation of this submission. Kieran Rose deserves particular credit for initiating the project and convening the group.

A key objective of the Community Workers Co-operative has always been to articulate the perspective of community based groups on policy issues of common concern. The particular interest in transportation policy comes from the involvement of the Community Workers Co-operative in seeking to influence the National Development Plan, drawn up by the government in 1989 to secure Ireland's share of the increased European Structural Funds. Three issues highlighted are of particular relevance to this submission:

A. The need for active participation by community-based groups in the preparation of the National Development Plan. This participation was allowed for under the new regulation number 2052/88 of 24th June 1988 governing the disbursement of Structural Funds. It was justified on the grounds of efficiency but also as an important mechanism in liberating local initiative and mobilising local resources.

   The concern of the Community Workers Cooperative with the development of structures to allow for such participation has continued in more recent times with work undertaken in the area of local government reform. A substantial submission made to the Advisory Committee on Local Government Reform and Reorganisation proposed a framework for including community-based groups in planning for their own areas of concern.

This same principle also informs a key recommendation in this submission, calling for the incorporation of user groups into the structures for assessing and planning transportation strategies. Frameworks to ensure access to such immediate localised knowledge can be of enormous benefit. However Ireland lags behind the rest of Europe in this respect.

B. Secondly, the needs of those disadvantaged and marginalised in Irish society must be prioritised. The targeting of investment on such groups was seen as a central element, vital to the success of any plan for economic revival. To ignore this was to further reinforce the growing inequality in Irish society and aggravate rates of dependency.

The submission also focuses on the needs of women, the unemployed, children and the elderly. It identifies how transport policy to date has reinforced their exclusion and sets out the changes required to reverse this trend.

C. Finally, the need for investment in public transport through the European Structural Funds. This need was identified on the basis of exchanges with community groups throughout the country. It was also based on an analysis of the massive, at times almost exclusive, use of structural fund grants on road building projects.

It was the work on this particular area of concern that led the Community Workers Co-operative to set up a subgroup to contribute to the debate on transportation policy for the City of Dublin.

The destructive impact of roads on local communities and the isolation due to inadequate public transport are both issues that have mobilised community groups throughout Dublin in recent years. In many cases this has been activity based on damage limitation. The present review process provides community groups with a rare chance to play a more constructive role as participants in the making of policy. This role can be realised only if the contents of this submission are taken on board by the review group. Participation by written submission is never satisfactory as, all too often, it serves as a means of legitimating that which has already been decided. The Community Workers Co-operative presents this submission with confidence that this will not be the case.

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1. INTRODUCTION

1.1 The Dublin Transportation Study And The Need For Community Action.

In response to the public consensus that Dublin faces major transport problems, the Minister for the Environment established the Dublin Transportation Review Group in 1988 to consider possible approaches to future transport planning in the Dublin region. The Review Group, comprised of representatives of the Departments of the Environment, Tourism and Transport, Finance, Industry and Commerce, Dublin Corporation, Dublin County Council, CIE, and the Gardai, recommended that a transportation study be undertaken to assess the transportation needs of the Dublin area.

The new Dublin Transportation Study (DTS) will be undertaken in two phases. Phase one will review the existing transport situation, evaluate previous transportation study recommendations and identify data requirements for phase two. This phase also requires the Consultants to:

"Examine and report on submissions received from the public and interested organisations in relation to the Phase 1 Study."[1]

The second phase will then look to future transportation planning, which will involve framing proposals for meeting existing and future transportation requirements in both 8 and 20 year timeframes.[2]

The new DTS, therefore, represents an important and perhaps final opportunity to break away from current transport policy, a policy that utterly fails to take account of the full range of mobility requirements of people in the community or indeed of the broader economic development requirements of the city. However, the struggle will be uphill, for the Minister for the Environment has already stated that the Review Group conclusions will not influence current plans for EC and government money already allocated.[3] These plans involve the largest ever capital spending programme on transport, to be spent by the end of 1993. In other words, the review group recommendations, if they are at variance with existing plans, will in all likelihood be shelved for the indefinite future.

To counter this 'politics of appearance', it is essential that the transport needs of local communities are effectively articulated.

1 Dublin Transportation Study: Brief to Consultants, Section 2.1(d), Department of the Environment, 1990.
2 Department of the Environment, 1990.
3 Press Release from Department of Tourism and Transport, 2nd May 1989.

1.2 Community Action and Information

The aim of this report is to contribute to efforts to create a more equitable and efficient transportation policy, with greater consideration given to the transport needs of the majority of people without access to cars; as well as to the wider economic and social benefits of a high quality public transport system. The rationale underlying this report is that there is no contradiction between efficiency, economic effectiveness and equity — indeed the more equitable choice is also the most cost-effective. Previous transportation policy concentrated on expanding road space for the private car owner at the expense of the public transport system. The resulting transport crisis has led to widespread consensus that the transport difficulties Dublin now faces can be solved only by the provision of an effective public transport service.

Translating this consensus into policy action requires an effective community-based challenge to existing transport practices, based on a full debate of the social, economic and planning issues involved. This report seeks to contribute to that debate by:

- Reviewing the transport situation in Dublin since the Dublin Transportation Study in 1971;
- Highlighting the persistent bias against public transport in evaluating alternative transport options and allocating investment expenditure;
- Presenting the case for public transport as an essential service and the need for consumer input in the evaluation of its efficiency and performance;
- Making recommendations on future transport planning, reflecting the analysis and needs of community and special interest groups throughout the city.

2. PRESENT PROBLEMS - PLANNED CHAOS?

2.1 Background to the Problem

It is important to precede any study of the transport problems facing Dublin by a brief summary of the background to the current transportation position, for Dublin is not unique in having to pay bitterly for past planning misjudgements and the attempt to superimpose a road network and new urban forms on an already established city. However, whereas most European cities have learned from past mistakes and adapted planning accordingly, Dublin now languishes in a state of transportation chaos, influenced by a redundant transportation plan no longer relevant to the needs of the people living in the region.

Perhaps the most important study to have shaped the development of Dublin was the *Myles Wright Settlement Strategy* (1967) and the subsequent *Dublin City and County Development Plans* which incorporated the Wright proposals. The Wright report was produced in response to the pressure for expansion and development created by population and economic growth within the Dublin region.

The main recommendations of the report were that three new towns should be built on the western edge of the city to cater for at least 60% of the expected growth in population. The three new towns, Blanchardstown, Lucan/Clondalkin and Tallaght, would be self contained in terms of jobs and services as far as this was possible given their proximity to a large urban area. As for transportation, Wright foresaw a large increase in trips between these suburban areas which would be undertaken largely by car.[4] This inter-suburban traffic would then be accommodated by new routes which would not pass through central Dublin. Pressure on radial routes to the city would be reduced as the new towns catered for their own and each others needs, reducing the need to travel to the city centre for work, shopping and other purposes.

Many of Wright's proposals were incorporated into statutory development plans then being prepared by the relevant local authorities in the Dublin region. However, in order to quantify the transport elements in the development plans, the *Dublin Transportation Study* (1971) was commissioned by the Department of Local Government. This study, which has haunted Dublin transport policy ever since, was to make recommendations about transport problems in Dublin over the next 20 years.

4 Killen, 1979, pp 154-55.

The *Dublin Transportation Study* (DTS) was the first major transportation study of the greater Dublin area and involved the use of complex traffic forecasting modelling techniques. However, the very complexity of the models tended to obscure the key assumptions of the modelling technique being used. In particular, the DTS assumed that 'modal split' (the apportionment between forms of transport people use) was dependent on such characteristics as the income and car ownership of trip makers rather than on the quality of particular modes themselves. Consequently, a bias towards private and against public transport was built in from the outset:

"In the case of Dublin, if one projects curreot trends - increasing car ownership and decreasing use of public transport - into the future, under the assumption that additional factors will not intrude to invalidate the projections, the plan which emerges is obviously one which incorporates major road improvements with secondary schemes to maintain public transport."[5]

Another key assumption of the study was that the projections of the *City and County Development Plans* would in fact be realised,i.e., that the new towns would be largely self-contained in terms of jobs and amenities and therefore not lead to any major increase in trips to the city centre.

Given these assumptions, the DTS therefore proposed to spend 86% of future spending on road construction and improvement but only 14% on investment in public transport.[6]

The DTS was thus largely a passive planning response to existing trends rather than a visionary plan setting clear objectives in relation to the transport needs of the whole community. In this regard it has become somewhat of an anachronism:

"There is virtually complete consensus now in rejecting the policy that infrastructure can or should be expanded at a rate matching expected traffic growth".[7]

However, even in its own terms, the DTS became redundant very quickly. Significantly, the predictions of the Wright plan were never to be realised. The 'new towns' never saw the promised services and employment that would have enabled them to become self-contained, and Dublin was still the main centre for jobs and amenities. Pressure on the radial routes was to increase to the level we see today, and indeed would be worse had the optimistic projections for car ownership contained in the DTS been realised.

The flaws inherent in the DTS therefore were:

— The study itself was merely a derivative of previous settlement strategies. Had land use and transport studies been more integrated, then the social costs of low density development could not have so easily been ignored.

— Predictions concerning the settlement strategies themselves were never realised, leading to congestion along the radial routes into the city. The attempt to impose a car based solution on transport was to lead to major destruction of the city and of the communities living within it.

— The study implicitly accepted the car as the best mode of future transport. This was assumed largely on the basis of a fall in use of

5 Killen 1979.
6 An Foras Forbartha, 1971.
7 Godown, 1990.

public transport, but there was no attempt to question why this was occurring nor to take into account the impact that planning could have on influencing modal choice.

— The study effectively ignored the transport needs of those who did not have access to a car. As Hillman and Henderson noted:

"Perhaps it is an indication of Dublin politics, but the low level of car-ownership makes it surprising that such a large part of the proposed expenditure on the plan is devoted to catering for those who use private cars. With less than one car for every five persons, we could have looked for a plan which treated the car-driver as the 'residual' population instead of the usual relegation of the public transport passenger to this status.[8]

— In fact the whole basis for devoting major expenditure to road construction was that car ownership would rise by 1991 to the level of 0.38 cars per person. Not only did this projection prove inaccurate, but no analysis was undertaken of the actual patterns of car use and the mobility problems that faced the majority of people who did not have access to a car.

However the DTS did not entirely close the door on other transport options and made the important proviso:

"However, if a strong demand for transportation arises between the new towns and the city centre, the onus will fall on the public transportation system. In this regard, traffic congestion will make bus travel to the city centre less attractive and enhanced rail connections for Blanchardstown and Clondalkin will be required. If the railway is provided with a direct connection to the city centre, its area of coverage will be increased.[9]

As a result it was recommended that a further study be undertaken to assess the potential for the development of railway in the Dublin area. This was the *Dublin Rapid Rail Transit Study*, published in 1975, which recommended a rapid rail transit system serving Tallaght, Ronanstown and Blanchardstown also having a connection to an underground central station in the city of Dublin. The existing coastline railway would also feed into the central station, serving the Howth-Bray corridor. The use of existing rail lines was estimated to hold the capital cost of the proposals at £88 million in the period to 1991.[10] The first stage of this project, the Howth/Bray DART line, was opened in the 1984 at a cost of £114 million. However, this was considered by the government to be excessively expensive, and in 1987 the Minister of Tourism and Transport directed CIE to abandon plans for the extension of the DART system to Tallaght and to concentrate on bus and diesal options instead.

8 Hillman and Henderson, 1973, pp 115-16.
9 An Foras Forbartha, 1971.

As a result of this, Dublin now finds itself in a state of transportation crisis. Despite the irrelevance of the DTS to the transportation issues facing the city, the study still has a malign influence on the ad hoc solutions to congestion that have been implemented in the 1980s. In particular, priority is still given to road based solutions in terms of money actually spent, and about to be spent over the next decade. It is to these issues we now turn.

2.2 Present Problems

The failure of Dublin to develop along the lines envisaged in the Wright plan and the *City And County Development Plans* has effectively rendered the 1971 DTS redundant as a specific instrument of that settlement strategy, long before the expiration of the plan horizon.[11] However, this has not stopped the imposition of a road based solution on the transport problems. Over the past twenty years, £121.5 million has been spent purely on *capital* investment in public transport for Dublin, the vast majority on the DART, compared to £211.6 million on road projects.[12]

Adapting the city to the needs of private car users has involved considerable social cost. In particular, it has been the cause of increasing congestion, the restriction of mobility for much of the population, and environmental destruction.

2.2.1 Congestion

Perhaps the most visible social cost of providing for private motorists is congestion.

The years between 1967 and 1989 saw a 22% increase in the total number of morning peak trips to the inner city of Dublin. The importance of private cars in catering for this increase can readily be seen in the following illustrations.

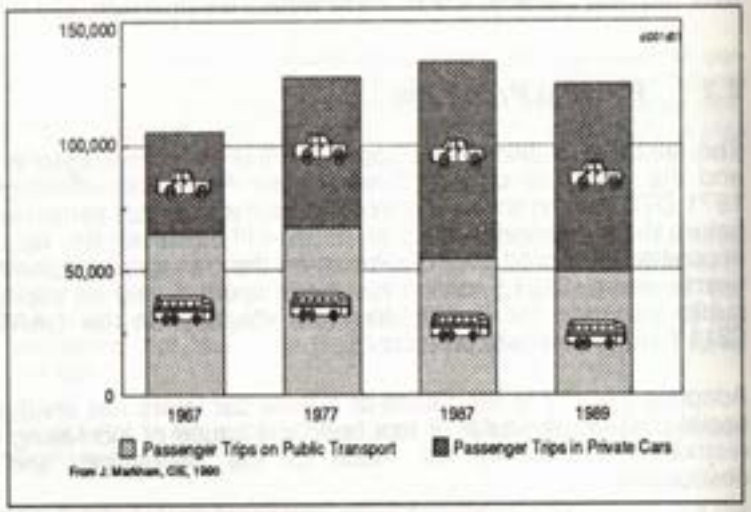
Whereas in 1967 public transport accounted for 54% of these trips compared to 34% for cars, by 1989 this situation had been reversed, with cars now accounting for 52% of total morning peak trips compared to 34% for public transport.[13] Thus, in the space of two decades, the car has become the predominant means of commuting in the Dublin region.

As a result of this radical change in 'modal split', Dublin now has a severe traffic congestion problem. In 1988, 52,324 cars crossed the central cordon of Dublin, carrying only 75,346 passengers. In other words average vehicle

10 Zimmerman, J., 1979, pp 43-44.
11 Dublin Transportation Task Force, 1989.
12 Departments of the Environment and Tourism, 1990.
13 Markham, 1990a.

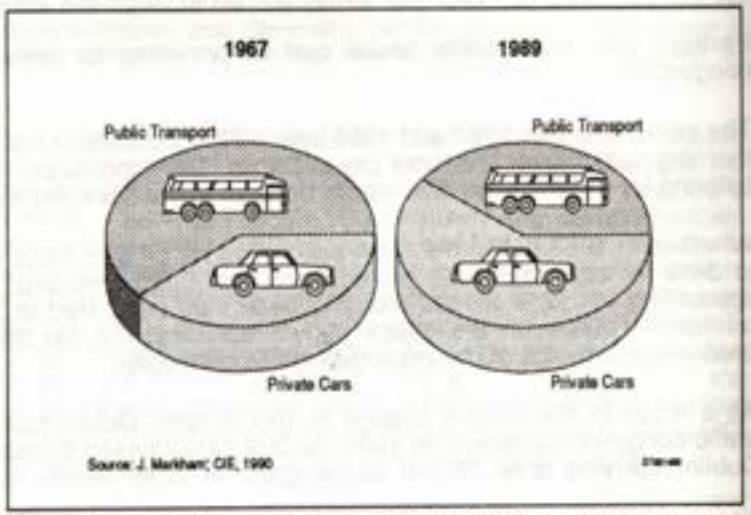
occupancy for cars in 1988 was 1.44, compared to 38.1 for buses. Transport in Dublin does not cater for movement of people, but for movement of vehicles.

FIG 1: PUBLIC AND PRIVATE TRANSPORT IN DUBLIN, 1967-89



Buses, on average carrying at least ten times the numbers carried by car, are given no right of way and no special support, and therefore fail to compete as an effective alternative mode.

FIG 2: COMPARATIVE MODAL SHARE, 1967-89



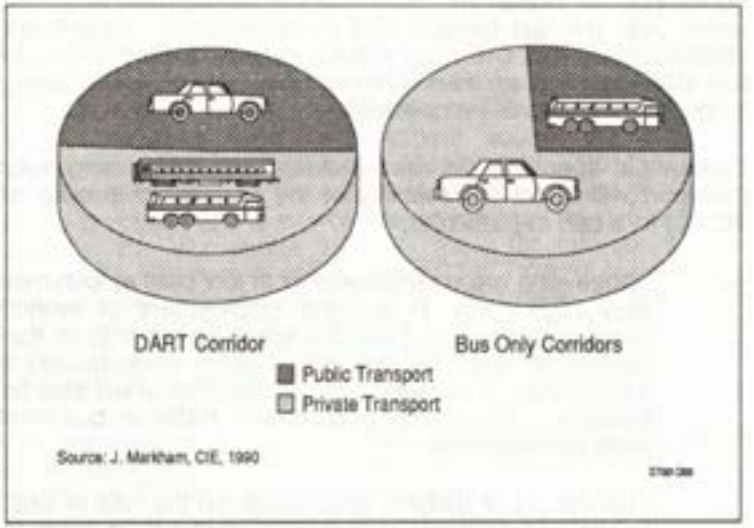
That buses have been losing out to cars in terms of total passengers carried can readily be verified from the annual surveys on traffic entering the central cordon (area between the canals) of Dublin. Passenger occupancy rates for buses have declined from 47.5 in 1980 to 38.1 in 1988. As the advantages of public transport are further eroded by the unreliability caused by congestion, more people have taken to using cars. This has lead to a 6% increase in car traffic entering the central cordon of the city between 1980 and

1987. The actual increase in car traffic, however, is likely to have been much higher as the 'cordon' surveys do not measure the volume of traffic entering areas such as Ballsbridge from the south side of the city.

The effect this radical reversal in modal split has had on congestion can be seen in that general traffic now averages speeds of 11 miles per hour at morning peak hours. Buses, which have no right of way over cars, also average speeds of 11 miles per hour to the city, and this would be considerably lower but for the imposition of bus lanes.

So one of the primary diseconomies of congestion caused by car use is the negative effect on public transport itself. Congestion erodes any advantages public transport may have to offer the commuter. This can readily be seen from comparing modal splits between the 'DART plus bus corridor' and the 'bus-only corridors'.

FIG 3: COMPARISON OF DART AND BUS-ONLY CORRIDORS



In the DART plus Bus corridor, where public transport need not compete for roadspace with cars, more than 50% of total commuters use public transport. Furthermore, from 1985 to 1989 public transport maintained its share of commuters carried, despite the fact that car availability among DART passengers is at least three times that among bus passengers[14]. On the bus only corridors on the other hand, the percentage of commuters using public transport has declined from an already low figure of 30% in 1985, to 26% in 1989.[15]

14 CIE, 1990.
15 Markham, 1990b.

2.2.2 *Mobility Deprivation*

The emphasis in transport policy on catering for increasing car ownership can be justified only by ignoring actual patterns of car use. In a survey on car use conducted in 1982 it was found that the majority of drivers tended to be full time employed, male and within the 31 to 50 year age group.[16] Census data confirms that even for higher income groups, access to the household car is limited. In particular, the commuting wage earner in one car households is likely to leave for work each day leaving the household worker (usually a woman) dependent on public or non motorised transport.

Whereas mobility has been increased for the minority (with discretionary use of a car) this has been achieved effectively by reducing the mobility of the majority who must rely on public transport. This is reflected in the level of government support deemed appropriate for public transport. Dublin has one of the least subsidised public transport systems in Europe, with Dublin Bus recovering 81% of its operating costs from its fares. Despite this the annual subvention to Dublin Bus and the CIE group has been decreasing in real terms over the last decade and the Minister of Tourism and Transport has stated publicly that CIE must reduce its dependence on the Exchequer. To do this CIE claims they have only two courses of action open to them, either increase revenues or reduce costs.

Substantial spending on road building and decreasing subsidies for public transport will affect the mobility of the majority of people who do not have access to a car. In particular:

— Those who are unemployed or in low paid employment are faced with very high costs in seeking employment or working outside their immediate locality. Even if a job is found outside their own area, the journey to work by bus may involve considerable travel time if an interchange is necessary in the city. Travel will also be expensive and, because of the effects of commuter traffic on bus timetables, will quite likely be unreliable.

  The effects of mobility deprivation on the rate of unemployment itself needs comprehensive research. However, a study in England found that increasing the mobility of inner city residents helps achieve a better spatial allocation of employees to employers, a reduction in hard-to-fill vacancies, and some redistribution of pockets of high unemployment.[17]

  The lifestyle of unemployed people is also affected by the concentration of public transport on the needs of employed commuters. Frequency levels at off peak times are considerably reduced in many areas, which restricts access to shopping and amenity areas. For example, those without cars who wish to enjoy the considerable amenities of the city centre are constrained by bus timetables, where services terminate at relatively early hours.

— Families in communities are affected considerably by inadequate public transport and the growth of car traffic. Surveys in Britain[18] have shown that growth in car traffic involves a considerable loss of freedom for children, as parents feel obliged to constrain their activities due to new roads and increasing traffic. Women, who still shoulder the main responsibilities for young children, also experience a loss of freedom and in built up areas feel obliged to accompany their children to school, playground and other leisure activities because of fear of accidents.

  "Indeed, parents are often admonished for not accompanying their young children. Able bodied adults accompanying able bodied children because of fear is one of the more disturbing and wasteful by products of the motorised society."[19]

— The failure of public transport to keep up with the decentralisation of shops and hospitals within the Dublin region has resulted in considerable difficulties for people without access to cars. This decentralisation has not been easy to integrate into the public transport network. Whereas previously a trip to hospital may have involved one bus trip into the city centre, now it may involve either an interchange in the city centre or long waits for infrequent inter-suburban routes. The new hospital planned for Tallaght for instance, will service a much wider area than the community in which it is located, as it will take over the services currently being provided by the Adelaide, the National Children's Hospital and the Meath, all located around the centre of the city.

  As well as inconvenience, access to decentralised services by public transport imposes huge costs on those who can least afford it. In a recent study on the St. John of God Child and Family Centre in Tallaght[20], it was found that the transport costs for many attendees who lived in West Tallaght, particularly those on social welfare, were prohibitive. For example, a woman in receipt of the maximum Deserted Wives Assistance payment had an overall weekly income of £72.60 for herself and two children. If one child were to attend the centre three days a week, it cost £6.90 or 9.5% of the family's weekly

16 Feeney, and Hynes, 1982.
17 Stanton, Cahill, and Howden, 1981.
18 Hillman, Henderson, and Whalley, 1976.
19 Hillman, Henderson, and Whalley, 1976.
20 Murphy-Lawless, Dillon, and Ungruh, 1989.

budget to take the child to the Centre in the morning, return home, and return to the Centre at the end of the day.

— Inadequate investment in public transport presents added difficulties for people with disabilities. This has been highlighted in a recent report on access and mobility problems faced by disabled people in the Dublin area.[21] Bus services in Dublin are adapted largely to cater for the needs of the able bodied. They are completely inaccessible to wheelchair users and with the introduction of driver-only buses, a disabled passenger has to depend largely on the goodwill of fellow passengers for assistance. Other obstacles for disabled people on buses identified by the report include:

- Poorly visible route numbers for people with impaired vision.
- Steep entrance steps
- Inadequate handrails and limited use of non-slip flooring material
- Seats which are too high and too narrow.
- Poor internal lighting and inaccessible bells to signal for the driver to stop.

Although all new replacement buses purchased by Bus Atha Cliath will have the specifications recommended by the statutory UK Disabled Persons Transport Advisory Committee so as to remedy the above difficulties, this will only apply to new buses and not the whole fleet.

Even if buses are modified to increase access for the disabled, major difficulties still exist. Many disabled people find the journey from home to bus stop a daunting prospect. Although a 'Hail and Ride' minibus service provided by Bus Atha Cliath on a number of suburban housing estates has been welcomed, the service is too limited in scale to make a difference to the mobility needs of the vast majority of disabled people in the Dublin area.

2.2.3 *Environmental Destruction*

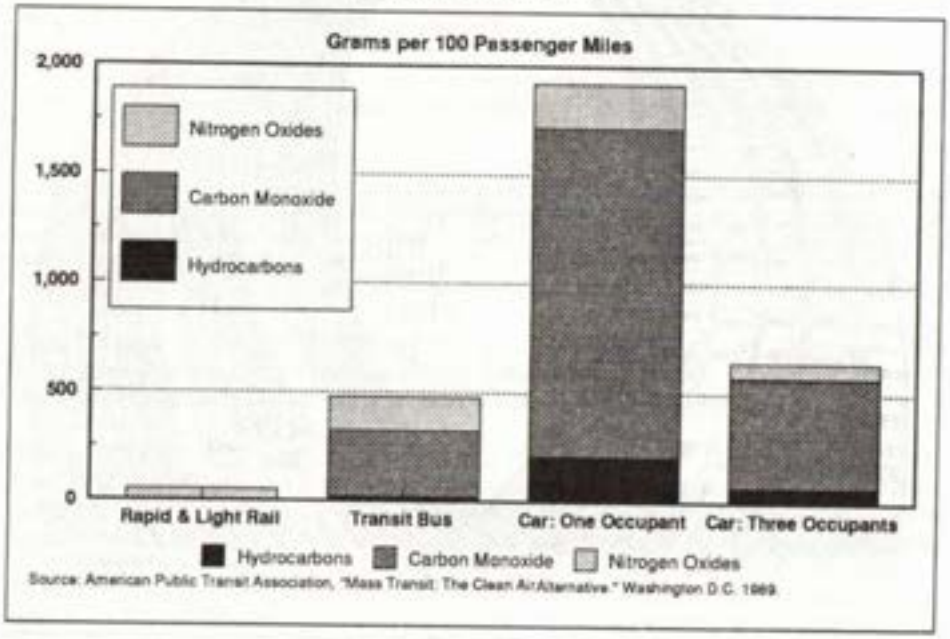
Cars are immensely demanding of space. Whereas a double track railway of 10 metres width can transport 40,000 passengers per hour, to transport the same number of passengers by private car would require a 135 metre wide motorway.[22] Not only this, but cars also need to be parked, so that in Dublin providing surface car parking (both legal and illegal) has become a major economic use of land in the city centre. With average car occupancy levels in Dublin as low as 1.44 at peak times, concentrating resources on this form of transport is a wholly inefficient use of valuable urban space. Changing the city

21 Woods and O,Beirne, 1990.

to facilitate such inefficiency has caused major damage to the physical fabric of Dublin, reducing the level of amenities available to inner city communities as shops and pubs are levelled to provide more road space. New roads and the inevitable increases in traffic also present significant danger to the local communities in terms of increased accidents and the health effects of air pollution.

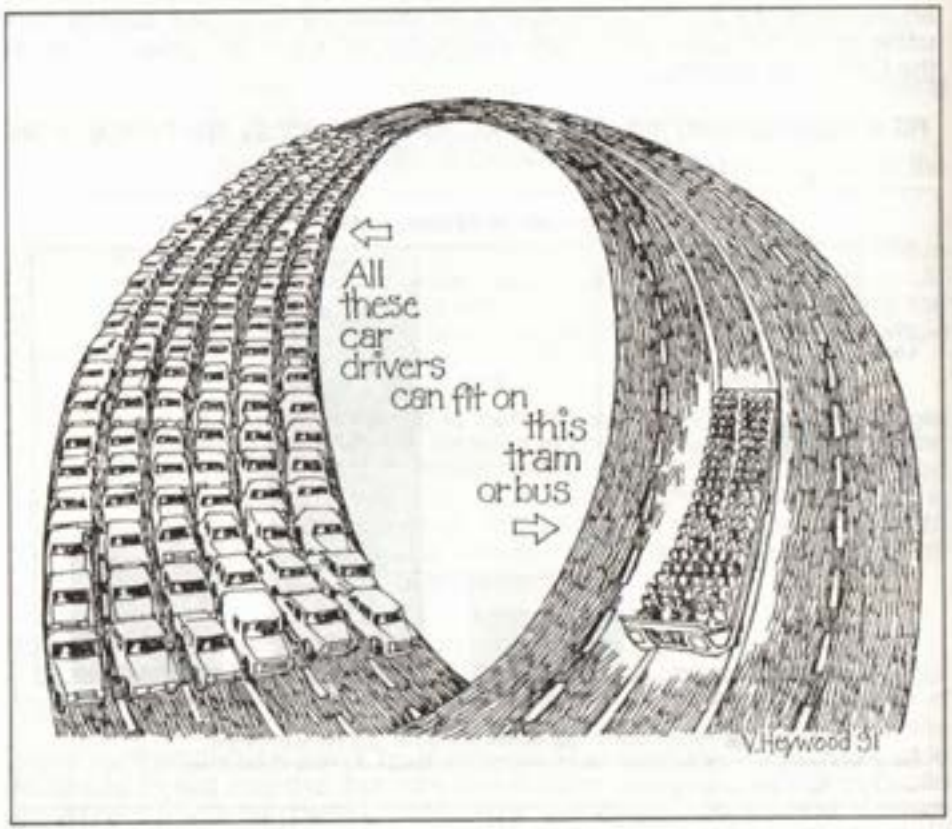
In the OECD countries it has been estimated that cars contribute 75% of carbon monoxide emissions, 48% of nitrogen oxides, 13% of smoke and 3% of sulphur dioxide.[23] A single car produces four times its own weight each year in CO^2, a major component of the smog that effectively immobilises large sections of the population of Dublin who suffer from respiratory problems. Public transport on the other hand, is dramatically less harmful to the air environment. As the following illustration shows the emissions savings from using public transport, particularly electrically run rapid rail systems such as the DART, are enormous.

FIG 4: POLLUTION EMITTED FROM URBAN TRANSPORT MODES, FOR TYPICAL WORK COMMUTES IN THE USA



22 Waters, 1990.
23 Gormley, 1990.

Perhaps the most serious environmental impact of road traffic, however, is the level of accidents. On average, more than 400 people are killed on the roads in Ireland and nearly 8,000 more injured.[24] Adapting the city for the car presents immense physical danger both to the people who use cars and to the communities who live beside urban road networks. Public transport, on the other hand, is much safer. European statistics show that where travel safety is concerned, the likelihood of accidents is 125 times greater for private car users than for train customers. Road accidents are also a serious drain on the Irish economy. Taking account of under reporting of injury and material damage, road accidents are estimated to have cost the Irish economy £500 million in 1988 alone.[25] The Dublin area accounts for roughly 25% of this figure.



24 McDonald, 1989a.
25 Environmental Research Unit, 1988.

3. PUBLIC VS PRIVATE

It is widely acknowledged that existing transport policy in Dublin is inadequate. Increased road building has met with considerable resistance and there is growing acceptance of the wider social costs of catering for car users in an urban context. Although the government now ostensibly accepts the importance of public transport as a solution to the transport chaos which now exists, this is not reflected in future investment proposals.

In the *Operational Programme on Peripherality* published in late 1990, the allocation of Structural Funds for transport infrastructure for Ireland was agreed between the government and the European Commission. The document states that:

"Greater emphasis is being placed on investment in an effective public passenger transport system which is widely recognised as making an important contribution to urban development and regeneration. Public transport is also an efficient way of carrying people to and from their work places and also contributes to reducing road congestion and alleviating the impact of road vehicles on the environment."[26]

The programme goes on to list more of the benefits of public transport in the areas of tourism and industrial development. In particular it acknowledges that:

"Public transport is of particular significance for the most disadvantaged in society who cannot afford private transport and facilitates the unemployed in availing of job opportunities within a wider catchment area from their homes. The development of public transport services, therefore, has an important part to play in alleviating the impact of Ireland's peripherality and in supporting economic development."[27]

Despite this excellent summary of the benefits of public transport, the programme will nevertheless allocate £300 million for road improvements in the Dublin region and only £27 million for public transport.[28]

The rationale, or at least the pretext, for this distortion in investment priorities lies in a consistent bias against public transport in the method of appraisal adopted for different transport modes, practiced by all government departments and local authorities. Public transport projects are consistently and routinely subjected to a narrower and more stringent method of appraisal, in which little or no account is taken of the wider social and economic costs and benefits.[29] There is therefore a tendency to overestimate the true costs of

26 Government of Ireland/Commission of the European Communities, 1990, p29.
27 Government of Ireland/Commission of the European Communities, 1990, p29.
28 McDonald,1990b.
29 Markham, 1990b.

public transport and underestimate those of roads; and to underestimate the true benefits of public transport and overestimate those of roads.

Indeed it is ironic that cost/benefit analysis, which attempts to assess the optimum investment allocation from the point of view of society as a whole, is used in appraising only road proposals. The road user benefit approach estimates the time, accident and operational savings that would accrue to travellers on alternative road schemes. This approach is flawed in an urban context however, for as the Dublin Transport Task-force says:

"There is a danger that the provision of additional roadspace - the need for which has not been fully appraised - will increase traffic flows in the city centre, create pressure for increased city centre car parking facilities, and militate against the official policy of giving priority to public transport."[30]

Perhaps the most crucial point here is that the whole system of road appraisal makes a nonsense of the "official policy of giving priority to public transport". Specifically:

1. As mentioned before, the use of the cost/benefit appraisal method is limited to considering alternative road proposals. Assessments of public transport proposals on the other hand, have generally been subjected to commercial appraisal which is far more rigid and takes no account of the wider economic and social benefits of an effective public transport system. For example, of the £114 million it cost to build the DART, £10 million was incurred in paying VAT and £27 million payment in interest. If the cost/benefit analysis used to appraise road projects had been used, these charges would not have been included, reducing the real economic cost of the project to £77 million.[31]

   Furthermore, no attempt was made to quantify the wider socio economic benefits of the DART system. For instance, the DART now serves more than 50% of commuters in the DART corridor and it is estimated that up to 8,000 cars are left at home each day by DART users. Savings in additional road capacity and parking facilities have been substantial. It has been estimated that off-street parking facilities for 7,000 cars, would alone cost in the region of £20 million.[32] The DART is also safe, environmentally clean, efficient in terms of land use and has obvious potential for increasing tourist revenue.

2. Congestion significantly affects the performance of bus based public transport. Passengers have to suffer substantial deviations from schedules, slower journeys, and higher fares as congestion increases the amount of capital, labour and fuel needed to provide a given

30 Department of Tourism and Transport, 1988.
31 McGeehan, 1987.

frequency of service.[33] Despite this, road appraisals do not include any assessment of the benefits or disbenefits to public transport of different road proposals.

3. Although private motorists pay road tax there has been little attempt to assess whether these taxes reflect the true marginal cost of additional road traffic as road taxes are not 'earmarked' for road expenditure.[34] If motorists were obliged to pay the full economic costs of driving in the city, it is likely that demand for road space in Dublin would be considerably reduced. Indeed, the cost of providing for commuting car owners is particularly high as:

   "The traffic congestion problems of Dublin at present are due not to lack of road space but to inadequate capacity at peak traffic times, i.e., valuable road space is used up by undesirable long-term parking, illegal parking and other inefficient use of street capacity."[35]

   These distortions would suggest the need not only for some method of road pricing, but equally for subsidising public transport. Indeed:

   "Where there are competing suppliers of transport services, there is a case for both taxing road users who cause congestion and subsidising those who reduce it."[36]

4. It is generally accepted that public transport is characterised by external economies of scale, and private car based transport by external diseconomies of scale. Specifically, as the flow of travellers by car increases on a given road network, traffic speeds fall and parking becomes more difficult. Improvements in the rate of flow become increasingly expensive in time and money. For travellers on public transport, on the other hand, as flow increases, more routes can be run and frequencies increased.[37]

   Public transport modes, particularly those with a high proportion of fixed system costs such as the DART, are also characterised by internal economies of scale. Any revenue support therefore, which increases the use of the service, will also have the effect of reducing its unit cost of production.[38] Experience with the DART largely proves this point, for as the number of people using the service has risen, the annual state subvention needed to cover the operating costs of the

32 Waters, 1990.
33 McGeehan, 1987.
34 McGeehan, 1987 p6.
35 Department of Tourism and Transport, 1988
36 Mogridge, 1990.
37 Mogridge, 1990.
38 McGeehan, 1987.

service has declined steadily from nearly £15 million in 1985 to less than £6 million in 1989.

Despite such potential for economies of scale, investment in public transport has been too piecemeal and at too low a level to realise them. As we have seen, the DART, the only major investment in public transport in the Dublin region over the last decades, clearly demonstrates that a high quality public transport system can attract car users onto public transport. Loadings on the DART are broadly in line with the projections of the Dublin Rapid Rail Transit Study (DRRTS) even though DART was only one phase of the DRRTS proposals and was intended to serve the central area more directly and be connected to a much larger city wide rapid transit network.[39]

If all the proposals recommended by the DRRTS had been implemented the suburbs of Tallaght, Blanchardstown, Clondalkin and Ballymun would have been linked into an integrated rapid transit system, connected to a central station in the city. As the DART carried 15 million people in 1989, it is estimated that the full DRRTS system could increase this figure to 45 to 50 million per annum, and eventually break even from an operating viewpoint.[40]

However, implementing the DRRTS proposals is not being considered by the government. In the *Operational Programme On Peripherality: Roads and other Transport Infrastructure* agreed between the Government and the Europeean Commission, only £27 million has been allocated for public transport, which will be spent on the provision of a diesal rail link between Connolly Station and Clondalkin. Roads on the other hand have been allocated £300 million.

Urban transportation systems for the general public, whether public or private, do not come under the catagories eligible for Structural Funding; only transport connected with economic development. Within the Operational Programme, the major expenditure on roads in the Dublin region has been justified by reference to the necessary to offset the impact of Ireland's peripheral location. Investment in road building in the city is to be concentrated on ring and relief roads which will take port traffic out of the business, shopping and residential areas of the city. However, since these ring and relief roads will have access to radial routes, they will also facilitate easier access to city centre for private car commuters, exacerbating existing congestion problems.

39 Waters, 1990
40 Waters, 1990

An alternative approach to offsetting the costs congestion imposes on port traffic might have been to propose major expenditure on public transport, which would free existing roads and would not have the side effect of exacerbating congestion problems in Dublin. In this regard, there is a need for the government to state the arguments they used used to justify to the Commission the inclusion of the proposed Connolly to Clondalkin rail link within the framework of the the Programme on Peripherality . Such arguments could then be extended to achieve a greater share of the Programme's funds for public transport.

As for the proposed rail link to Clondalkin itself, it is difficult to see how this will substantially enhance the provision of public transport to the western suburbs. For instance, under these much reduced proposals, a trip to the city centre from Tallaght will involve taking a feeder bus to Clondalkin and taking a train which will go under the Phoenix Park towards Glasnevin and swing back towards the less than central Connolly Station. Despite the blatant inadequacy of this service, the government-appointed consultants who carried out a major study of Dublin in the context of Ireland's application for EC Structural Funds, recommend that any decision on providing a rail spur to Tallaght be deferred until the operation of this low cost alternative is monitored for some years.[41]

5. Since CIE must produce annual accounts, the cost of public transport is open to considerably more scrutiny than the cost of building and maintaining roads. This tends to distort public debate, giving the impression that public transport is expensive and wasteful, and road schemes costless. However, public transport in Dublin is undersubsidised in comparison to European cities of its size. In 1989, Bus Atha Cliath recovered 81% of its operating costs from passenger fares.

Of 28 urban systems in Western Europe operating between 81 million to 240 million passenger journeys, Bus Atha Cliath ranked 6th highest in terms of the percentage of operating costs recovered from passenger fares. Indeed the picture gets even more extreme when compared to *larger* European cities. Of the 16 urban public transport systems in Western Europe operating 241 million passenger journeys or more, Bus Atha Cliath ranked *second* highest.[42]

The impression exists that only public transport is subsidised. Yet, with few exceptions, infrastructural investment and maintenance costs of roads are 100% grant assisted by the state, with no direct accountability for individual schemes.[43] As we have seen, although

41 Davy Kelleher McCarthy, 1989.
42 Janus, 1989.

motorists pay road and fuel taxes, no attempt is made to link this revenue to the actual costs of road building. Even if we ignore the externalities of private transport, building and maintaining roads is not cheap. Expenditure on roads in the greater Dublin area amounted to an estimated £425 million (1986 prices) over the period 1980 to 1987, representing about 20% of all expenditure on the National Roads Programme.[44] This figure does not include interest charges, traffic control or road safety. Furthermore, Drudy has estimated that where acquisition is involved, the cost of a 25 metre motorway could range from £3.4 million per mile to £17.1 million per kilometre.[45] By comparison the cost of the DART railway line from Howth to Bray was £2.8 million per kilometre.[46]

6. One of the main arguments used to rationalise massive expenditure on roads at the expense of public transport is that population densities in Dublin are too low to make an extensive public transport system feasible. With massive congestion now occurring in both the city centre and the suburbs, it is more accurate to say that population densities in Dublin are too high for cars. Indeed, comparing Dublin with several major European cities which do invest heavily in their public transport systems, it can be seen that the population density for the Dublin area is very near average.

43 Waters, 1990.
44 Drudy, 1988.
45 Drudy, 1988.
46 Modonald, 1988c.

TABLE 1: DENSITY AND CENTRALISATION OF POPULATION 1989

City	Pop. Density (ha^{-1})
Amsterdam	51
Brussels	67
Frankfurt	54
Hamburg	42
Moscow	139
Munich	57
Paris	48
Stockholm	51
Vienna	72
Zurich	54
Average	54
Dublin	51
Source: Fay, 1990.	

7. Despite these overwhelming arguments in favour of increased expenditure on public transport, the case for it is often dismissed through uncritical adherence to the contention that privatisation *per se* is a more efficient and acceptable policy to pursue. Yet there is nowhere sufficient evidence to support this position.

There is indeed evidence that in some areas in which privatisation of bus services has occurred, there have been improvements in service. However, these are linked *not to privatisation* itself, but rather to the forced abandonment of inefficient and sometimes inequitable practices by the monopoly. It is not that the new services are better, but that their introduction has forced improvements on often unresponsive monopoly providers.

More recent studies in the UK have seriously questioned basic assumptions underlying the privatisation argument in public transport. A review of bus deregulation in the Financial Times, for example, found that *"overall the level of services have remained broadly the same"*, but that some fares were up and some services were cut.[47] Evidence has accumulated to show that the introduction of privately owned and competing transport systems has, in many respects, led to

47 Financial Times, 16.2.87. Quoted in Sweeney 1990.

a deterioration of services, including higher fares and curtailed services.[48]

Sweeney[49] argues that what is needed is the commercialisation, not the privatisation, of public companies. Management, and sometimes trade unions, are responsible for the adherence to practices that may be convenient for administrative or sectional reasons, but which, unless ended, will afford the government an excuse to privatise. There are examples of union practices being pursued in the short term interest of members, that are counter to both their own long term interests and to the needs of users.

The sensible approach, therefore, must be to devise a means to force the existing providers to be more responsive and efficiency, without resorting to privatisation with its attendant risks and damage. Competition can play a positive role in improving services through permitting users a means to express dissatisfaction in such a manner as will force a company to improve its service—but it exacts a very high price, including increased inequity, poorer working conditions for employees, and, in the long run, higher fares and poorer service in a system motivated by profit and private greed. The same advantages could be achieved if users were given another way of expressing their dissatisfaction, a way that can have as forceful an impact as a refusal to travel. The privatisation issues thus in the end underlines the essential link between accountability to users and efficiency of the system.

However, CIE also has an infrastructural and a social role, which means that it must provide a service that is not simply efficient, but that addresses these other objectives. These have never been clearly formulated.

48 See for instance Bishop, M. & Kay, J.A., 1988, *"Does Privatisation Work? Lessons from the UK"*, London Business School.
49 Sweeney, 1990, The Politics of Public Enterprise and Privatisation, Tomar, Dublin.

4. TRANSPORT AS A PUBLIC SERVICE

In 1977 the OECD highlighted the need for countries to develop more coherent and explicit objectives in regard to transport issues, and in particular recommended:

"That methods for establishing travel needs should be developed which bring together, in a complementary way, demand modelling and a more normative approach based on social research. It is important to perform more definitive studies regarding the reasons why people travel"[50].

Although we are now in the 1990s, transport planning in Dublin gives little consideration to the transport needs of the whole community, nor to the wider implications for social development of particular forms of urban transport. Although subsidies are given to public transport, little attempt has been made to state clearly what welfare objectives should be achieved by the subsidy payment. Instead, commercial criteria are used to assess performance, equating efficiency of the public transport system with reduced dependence on exchequer funds. Taking this to its logical conclusion, Dublin, with one of the least subsidised public transport systems in Europe must also have one of the most efficient! It is perhaps an understatement to say that this does not accord with the facts.

It is essential to restate that the link between performance and subsidy payments to CIE requires clarification, for:

"Efficiency is generally an achievement of operations and management, and is separate from the decision to provide subsidy".[51]

There is consequently a need for public debate on two specific issues:

— First, what general social objectives should be gained by the provision of subsidy to the public transport system, and;

— Second, what criteria should be used in assessing the efficiency of achieving these objectives.

In relation to the first issue of social objectives, the Department of Transport has stated that public transport has efficiency, equity and environmental advantages over private commuter traffic i.e.:

"It makes more efficient use of expensive road space, provides mobility for those who do not have access to private cars and, because it is less intrusive and environmentally

50 Road Research Group, 1977.
51 McGeehan, 1987.

harmful than car traffic, it is more likely to arrest urban decay and enhance growth and development".[52]

However, as we have seen, these sentiments do not constitute policy objectives for no attempt is made to incorporate them into an evaluation of the subsidy payment to CIE.

If the government were to establish a more coherent set of policy objectives, then a mechanism could be developed to measure how well the services provided for the needs of public transport consumers, in terms of quality and price as well as efficiency of provision. For, as we have seen, the economies of public transport can be realised only if enough people actually choose to use the system.

52 Department of Tourism and Transport, 1988.

Perhaps the most effective method of improving and maintaining the quality of the public transport system is to incorporate user groups into the institutional structure of assessing the efficiency of public transport. In Britain for instance, Transport User Consultative Committees representing the public transport users have a statutory role in determining the hardship that may be caused by the closure of services and stations on the railway system. In Dublin the actual consumers of public transport have no formal role in influencing the quality of service

If such institutional changes were carried out, a comprehensive set of indicators could be used to evaluate the efficiency of the public transport operator in meeting the needs of public transport consumers. These indicators could include:[53]

- Fare Levels
- In Vehicle Journey Speeds
- Waiting Times
- Need For Transfer
- Reliability
- Service Duration
- Coordination
- Accessibility to a Service (including accessibility for older people and people with disabilities)
- Comfort
- Image of the Service
- Provision of Travel Information

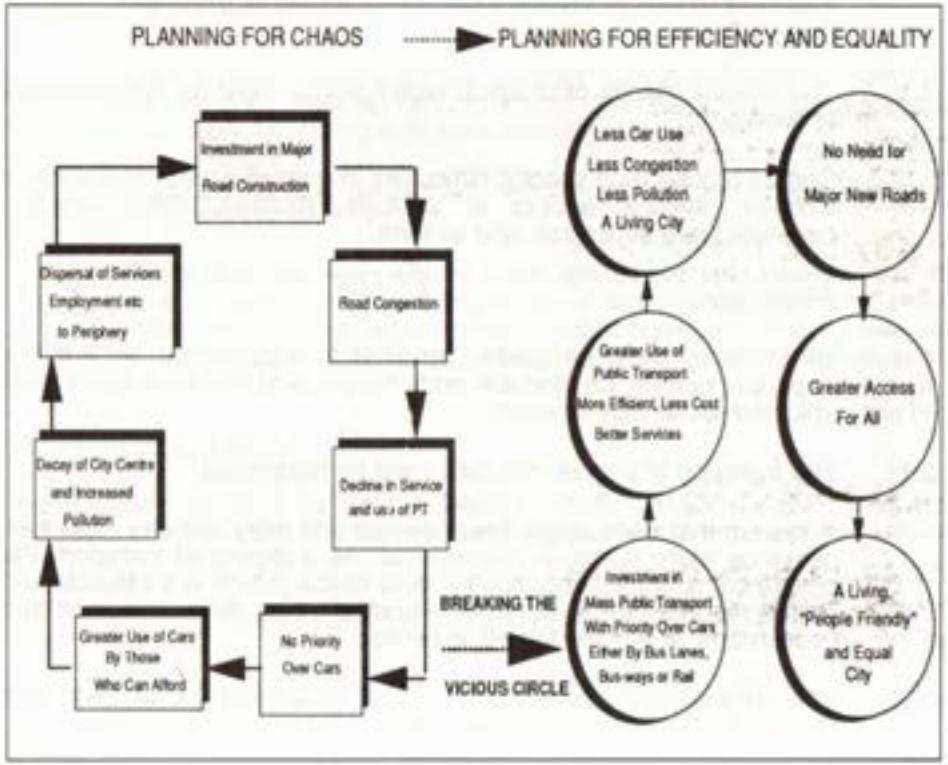
53 General Consumer Council For Northern Ireland, 1986.

5. PROPOSALS AND RECOMMENDATIONS

The present chaotic and inequitable state of Dublin transportation arises largely from a history of unreasonable bias in favour of private, and against public, forms of transport. Such a bias has not only created gross inequalities in access to transport and lamentable effects on the environment: it also militates against any prospect of developing a more efficient and cost-effective transportation system.

Isolated responses cannot satisfactorily tackle the formidable range of problems identified here. Rather, a fundamental reorientation of transportation policy in Dublin is needed. This must embrace all aspects of transportation, through planning, implementation and evaluation. Figure 5 illustrates the need to break away from the cycle of adverse consequences associated with the present overdependence on the private motor-car.

FIG 5: BREAKING THE CYCLE OF DESTRUCTIVE AND INEFFICIENT PLANNING



The following pages first present the principles that must underlie such a re-orientation. These are followed by specific practical recommendations that are required to address the immediate crisis.

5.1 Principles of Transportation Planning

1. *Equity*

Equity means an affordable, accessible, efficient transport service for all.

1.1 *Equity and efficiency are complementary*, not contradictory.

In general, a reliable, cheap and accessible system leads to more people using it, which reduces car usage, which reduces congestion, which improves transport efficiency, which increases economic prosperity, reduces pollution, lowers accident costs, reduces fatalities, and improves the quality of life for all. The present system is not only inefficient; it also promotes a two-tiered society of those with cars and those without.

1.2 The *specific needs of disadvantaged groups* must be systematically addressed.

Certain groups face specific difficulties in gaining access to transport, whether physical access to vehicles, facilities within vehicles, penalising fare structures, and so forth.

2. *Efficiency*

Criteria of efficiency must be guided by what is important: a system that transports people quickly, comfortably and cheaply, and that contributes most to economic and social regeneration.

2.1 The *transport of people*, not cars, must be paramount.

A system that encourages fewer people into more vehicles, and then demands more roads, is nonsensical. As a means of transport, the private car occupies enormously more space (which is a valuable and limited resource in an urban environment) than public transport and pedestrians, and at the latter's expense.

2.2 The *same cost and benefit criteria must be applied* in evaluating both private and public transport systems.

The benefits of public transport, in terms of easing congestion, improved employment prospects, fewer accidents and injuries, improved social amenities, lower environmental costs, improved tourism, and so forth must be included in the balance, as many are already for roads. Furthermore, the narrow cost criteria applied to roads must be broadened to include the hidden costs in economic, human and environmental terms.

2.3 *Public transport investment and subvention is cost-effective*, not a subsidy with no return.

Public transport as an efficient means to transport people, and public transport as an instrument and infrastructure for social and economic development, must be clearly distinguished in cost and benefit terms. The subvention to public transport (the cost of efficiently running the system less the direct income) can then be measured against the economic, social and equity benefits accruing.

2.4 Efficiency in public transport must be assessed against *explicit service quality criteria.*

Public transport users are the ultimate judges of quality of service, and efficiency must relate to how well their needs are met according to regularly monitored indicators formulated by users.

2.5 *Responsiveness to consumers needs* must be the guiding philosophy of a public transport service.

Privatisation has been shown to be against the long-term interest of users. However, through competition, it has obliged often indifferent monopolies to listen to customers. Public transport must implement this lesson, but without users having to shoulder the heavy price of privatisation.

3. *Accountability*

Accountability must, in the final analysis, be to the people of Dublin, who are the users of the system. The process whereby policy decisions are made must therefore be accountable.

3.1 *Planning procedures* must be democratic.

They must take into account the need for communities in the city to participate in transportation decisions that effect their own areas and lives.

3.2 *Implementation* of the transport system must be accountable.

This applies not only to the execution of the various elements, but also to ongoing evaluation of services. Users are in a unique position to judge the quality and effectiveness of transportation, and their input (including that of special interest groups such as people with disabilities) must be given statutory recognition.

3.3 *Participation must be adequately resourced.*

Without full information and a conducive environment, participation becomes meaningless. Research must be conducted and presented in a way that will enable fuller participation and the encouragement of the debate on transportation; users must come to see a good service as their right.

4. Integration

Only an integrated approach to planning and implementation can produce an acceptable transportation strategy for Dublin.

4.1 The *planning stage* must integrate both land-use and transportation aspects, with an over-riding concern to exploit our limited resources with long-term efficiency.

Dublin, unlike for instance Cork in the 1970s, has still failed to take this initial step. Furthermore, transport options must in turn be evaluated in the context of overall economic and social developments and plans for the regions (see 2.2).

4.2 The *implementation stage* demands the closest coordination and integration of the activities of all relevant bodies under a coherent authority.

An integrated plan is meaningless unless there exists the organisation necessary to oversee its implementation among government departments, local authorities, local interests etc.

Transportation workers, as service-providers, have an invaluable input to make into service planning and delivery. Their input should be formerly recognised and facilitated at both the planning and implementation stages.

5.2 Proposals for Action

1 Infrastructure

1.1 The balance of spending between public transport and road development in urban transport must be reversed.

The present EC supported Operational Programme on Peripherality, which proposes to spend over ten times more on roads than on public transport, is a sad indictment of the lack of insight, political will, and plain common sense of the government.

1.2 Mass transit systems (whether heavy rail, light rail, or bus lanes), with absolute reserved rights of way over other vehicles, must be the priority for transport spending.

There are many different proposals before the government, including recommendations of the DRRTS, that could be implemented to the above end.

1.3 Where there already exists partial infrastructure, there is no justification for further delays in constructing efficient mass transport.

The survival of great stretches of the Harcourt Street lines as well as the rail reservations to Tallaght constitute already existing resources that should be capitalised on without delay.

1.4 Immediate priorities in public transport spending should include:

- An expansion of the system of bus lanes to improve the operational efficiency of Bus Atha Cliath. This would include the creation of bus lanes on roads which may hinder the movement of private car traffic.

- The need for Bus Atha Cliath to upgrade its marketing efforts, which could start by making timetable information and pre-paid tickets more widely available in shops and pubs.

- Increasing the number of express commuter buses in the city.

- Increasing resources to reduce the level of illegal car parking in the city which not only increases the

number of cars on the road but also hinders the movement of buses through the city centre.

1.5 Service criteria for pedestrians should be established (for example, waiting times at traffic lights, carrying capacities of pavements) and a plan for improvements should be identified by the local authorities.

1.6 Cycleways should be extended on an annual basis to an agreed plan.

2. *Planning*

2.1 Current plans for roads and public transport must be re-evaluated using comparable cost/benefit criteria, taking into account the broader economic, social and environmental criteria.

2.2 All transport plans must include equity impact studies i.e., detailed studies on how the costs and benefits of particular road proposals impact on different social groups.

2.3 All road plans must include a study on the impact they will have on the effective provision of public transport services.

2.4 Local Authorities and developers must be required to consult with CIE in relation to all major development proposals.

2.5 Developers must be charged a public transport levy similar to those already charged for road improvements, sewage etc.

2.6 Future transportation and land use planning should be integrated to avoid the social and economic costs of treating both issues in isolation.

The need for this has been recognised with the latest *Green Paper on the Urban Environment* approved by the European Commission, which recommends that future submissions for structural fund assistance should demonstrate that such integration has been carried out. The Green Paper also identified the private car as the main cause of damage to the urban environment.

3 *Equity in Transport*

3.1 The government and CIE must clearly define the several roles of the city's public transport. This includes its narrowly commercial role, its broader social and economic role, and its equity role.

3.2 The government should ensure that Bus Atha Cliath upgrade its whole bus fleet to specifications recommended by the UK Disabled Persons Transport Advisory Committee (DPTAC), and not just the limited number of new replacement buses.

3.3 The three year *Action Programme* prepared by the Inter Departmental Committee on Access for Mobility Handicapped Persons should be made publicly available by the Minister for Tourism and Transport immediately. The proposals made in the programme can then be considered within the framework of the Dublin Transport Study.

3.4 CIE should make immediate low cost concessions to peoples with disabilities. This includes:

- "Hail and Stop" to operate on all bus routes for those with disabilities.
- Provide seating at bus stops with priority given to the disabled.
- More visible numbering on buses and better internal lighting.
- Adequate handrails, accessible bells and a public address system to announce stops on all buses.

4. *Participation*

4.1 The Dublin Transport Authority should be reconstituted on a directly elected democratic basis, to coordinate from a central fund the planning and implementation of all transport in Dublin.

4.2 An immediate increase in funding must be provided for CIE, and the new resources allocated with the input of user groups.

4.3 CIE must prepare a Five Year Plan, setting out existing problems, and their proposals and justification for the necessary improvement in public transport. The Plan should include the necessary criteria to enable the quality of public transport to be assessed on an annual basis. The Plan should be prepared with the full participation of users, including community and special interest groups.

4.4 For participation by user groups to be effective, it must be properly resourced. The Dublin Transportation Study Brief charges the consultants to:

"... identify the best international approaches to public participation in transportation planning in major urban areas and to recommend an approach to be adopted in Phase 2 of the Study" [54]

However, even the most progressive models will not ensure effective participation if full and comprehensive information is not available. Research into issues of direct relevance to users is essential, therefore, if Dublin transport is to reflect their needs in the future.

The brief of the Transportation Study, about to commence, contains few references to users, and they demand separate consideration. The direct involvement of users groups will be essential not only to the validity of results but as a practice in democratic planning.

Research will be required in at least three subject areas:

- To determine users' real transport needs and preferences, especially of those without access to private cars and those who prefer to use public transport. This must not be limited to current usage practices (although even these are largely ignored at the moment), but must also include likely consumer reaction to service changes.

- Service quality criteria, from the user perspective, must be developed; and a methodology devised for a comprehensive baseline study of the present situation. The baseline study can then be updated regularly to monitor progress.

- The experience of user participation in the planning and implementation of transport in other cities must be researched, as the DTS Consultants' brief demands, but this must be done in a way which takes into account the views of user interest groups, and their access to information.

To be effective, the first two of these will require the active involvement of community-based transport users in gathering baseline information and monitoring service provision.

54 Dublin Transportation Study: Brief to Consultants, Section 2.1(e), Department of the Environment, 1990

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A Note on Terminology

Many decisions about transport and other issues effecting our lives are taken in a professional setting, by planners and other officials, and are very often expressed in a way difficult to understand. One of the main causses of confusion and difficulty in understanding is the language used by professionals.

In researching this report, we ourselves had to struggle with the expressions, terms and language used in making and explaining decisions about transport in Dublin. In this document we could have chosen to ignore the jargon and present what is meant in simpler terms. However, if adverse policies are to be successfully challenged, then the terms used must be understood by a wider section of the population and not just by planners, officials and administrators. We chose therefore to include much of the planners' language in an effort to 'demystify' the debate about transportation and allow more participation in it.

To help the reader understand some of the terms frequently used in the transportation debate, the following 'Glossary of Terms' explains their meaning in language that enjoys more everyday usage.

TERM USED	TRANSLATED AS
Cost-Benefit Analysis	A study undertaken by planners and others, which compares the costs of following a certain course of action (for example, investment in aparticular stretch of road) with the benefits that might come from it (to industry, the community etc.). In theory at least, the decision to carry on is taken if benefits outweigh costs.
Modal Split	The proportion of travellers who use different modes or forms of transport. It is most often used to compare the proportion of travellers that use buses or trains with the proportion that use private cars.
Fare-Box Ratio	This is term used to show how much of a transport authority's operating costs are covered by the fares it charges, as against the amount that comes from state-subsidy.
Corridors	An area in which people can reasonably travel to a particular public transport route. For example, the DART corridor runs along the eastern seaboard of the city but because of the feeder bus system, extends to areas such as Donnybrook etc.
Cordon	The Central Cordon of Dublin is the area of the city between the two canals.

Cross Impact Analysis	Used to calculate the effect a plan or policy for one area or issue might have on other areas or issues. For example, what effects would the decision to build a motorway have on the commercial life of an area, the environment, or the social life of a community? In this report we concentrate particularly on the equity side of Cross Impact Analysis. In other words, the effect particular transport investment proposals have on the well being of different social groups.
Internal Economies of Scale	Economies internal to the process of production. These savings occur in an industry where unit costs decline as the levels of output increase. For instance, the highest proportion of costs for the DART system are fixed. Within a certain range, an extra passenger will not add to these costs but will still pay the same fare. Hence, unit costs decline.
External economies of scale	Economies external to the process of production. As the quantity of public transport provided increases, so does its quality. For example, if the demand for service on a bus route doubles and Dublin Bus responds responds by doubling the number of buses, costs per passenger remain the same as would the average time a passenger spends travelling on the bus. However, there is now twice as many buses, so frequency increases, reducing the average waiting time for a bus.
External diseconomies of scale	Diseconomies external to the process of production. For example, if more people use cars on a given road network congestion occurs, which reduces traffic speeds and makes car more expensive to the user in terms of time, fuel etc.
Population density	Number of people per acre or hectare.

Radial routes	If you conceive of the city road network to a bicycle wheel, the city is in the centre and the radial roads extend outwards to the suburbs like the spokes of the wheel.
Orbital routes	These are ring roads which circle or bypass the city.
Tangent roads	Roads which lead off the ring or circle roads around the city like a tangent, which is a line that touches a circle at a certain point. The main 'tangent' roads in Dublin are the outer and inner tangents, which rather defy the definition as they are not tangential to anything, but have added to the environmental ruin of the city.
Light rail (LRT)	The modern equivalent of the old tram, LRT can travel on separate track but is also light enough to run on tracks laid on the road network
Heavy rail	Rail such as the DART or intercity trains which travel on their own track and are too heavy to join the road network.

Transport Planning: Myths and Realities

It is not just because the wrong decisions are being taken that the present chaos exists in Dublin transport. It is that these decisions are based on unquestioned 'truths' which form the starting point for planners in making decisions on policy options. Accepting these 'myths' and refusing to question their own premise leads directly to current plans which make no sense, in terms either of efficiency or equity. Below, we present examples of such misguided myths:

Public Transport is inefficient

Untrue: Public transport moves more people more efficiently than the private car. It is more efficient in the use of valuable urban space and energy. It also reduces congestion, produces less air pollution, causes less accidents and, because it is more equitable, contributes substantially to the wider social and economic development of the city. Public transport is also characterised by economies of scale, so the more people who use it the more efficient it becomes.

Unlike public transport, cars are immensely demanding of space. Whereas a double track railway of 10 metres width can transport 40,000 passengers per hour, transporting the same number by private car would require a 135 metre wide motorway.

Huge levels of urban space are also needed to provide parking for cars both on and off the street. In 1987, 38,625 legal parking spaces were provided in Dublin. This does not take into account the huge number of illegal parking lots which exist on cleared land. As for on street car parking, the Department of Tourism and Transport estimates that the number of illegal car parking acts in Dublin in 1987 was as high as 8.5 million.

Public transport requires less energy to move people. For example, a commuter train carrying 80 passengers requires roughly 710 British thermal units (Btu) of energy per passenger mile compared to 7380 for a car with one person.

As public transport carries more people using less space, it significantly reduces congestion. For instance, it is estimated that because of the introduction of the DART, up to 8,000 cars are left at home each day by DART users.

Public transport is more equitable as it provides access for those who cannot afford cars. The wider economic benefits of equity are substantial as increased access reduces the costs of providing jobs and amenities at the local level.

Public transport is typified by internal and external economies of scale. In terms of internal economies of scale, any revenue which has the effect of increasing the use of the service also reduces the unit cost of running the service. This can readily be seen from the DART. As the number of passengers carried by the service increased since it was opened, the level of subsidy needed to keep it operational decreased from nearly £15 million in 1985 to less than £6 million in 1989.

As for external economies of scale, as more people use the public transport service, more routes can be run and frequencies increased. An increase in the flow of travellers by car on the other hand, leads to congestion, reduces traffic speeds and increases the demand for parking in the city centre.

Only public transport is subsidised

Untrue: With few exceptions, investment and maintenance costs of roads are 100% grant assisted by the state, with no direct accountability for individual schemes. Dublin Bus on the other hand, recovers 81% of its operating costs from the fares it charges its customers, which makes it one of the least subsidised urban transport systems in Europe.

Poor public transport is caused by mismanagement

Untrue: The primary cause of poor public transport in Dublin is lack of investment and the priority given to the needs of private car owners in past and current transportation policy. Congestion, the primary diseconomy created by increasing car use, reduces the reliability of public transport and substantially increases the amount of capital, labour and fuel needed to provide a given level of frequency. Where there has been substantial investment in public transport such as the DART, the service has proved fast and reliable with passengers carried increasing steadily to more than 15 million people in 1989. This is not to say, however, that management could not be improved.

Investment in public transport is more expensive

Untrue: If public transport investment appears more expensive than investment in roads it is due to the major and hidden bias against public transport when assessing transport options. Road schemes are appraised on

the basis of Social Cost Benefit Analysis which allows a valuation to be put on time, operating cost and accident savings. Public transport projects on the other hand, are consistently subjected to a narrower and more stringent method of appraisal, in which little or no account is taken of the wider social and economic costs and benefits. This leads to an overestimation of the true costs of public transport and an underestimation of the true costs of roads.

EC policy allows only for road development and infrastructure

Untrue: In the *Operational Programme On Peripherality: Roads and other Transport Infrastructure* agreed between the Government and the European Commission, major expenditure on roads in the Dublin region has been justified as necessary to offset the impact of Ireland's peripheral location. Investment in road building in the city is to be concentrated on ring and relief roads which will take port traffic out of the business, shopping and residential areas of the city. However, as these ring and relief roads will have access to radial routes they will give facilitate easier access to city for private car commuters, exacerbating existing congestion problems.

An alternative approach to offsetting the costs congestion imposes on port traffic, might have been to propose major expenditure on public transport, which would free existing roads and would not have the side effect of exacerbating congestion problems Dublin. In this regard, there is a need for the government to state the arguments used to justify the inclusion of the proposed Connolly to Clondalkin rail link within the framework of the Programme on Peripherality and how these arguments could be extended to achieve a greater share of the Programme's funds for public transport.

Considering public transport as a public service takes away from its effectiveness economically

Untrue: Both functions serve the same end. An effective public transport system helps to maximise the use of a whole range of services in the city by providing access to them. It also facilitates the unemployed in availing of job opportunities within a wider catchment area of their homes and reduces the costs of providing specialised transport services to people with disabilities. Cheap and efficient public transport also has an important role in the development of the tourist industry.

The real experts in transportation planning are private consultants or road engineers

Untrue: The real experts in transport planning in Dublin are the people of Dublin. Although this includes car owners who face increasing congestion on the roads, it also includes the majority who do not have access to cars and

who not only find public transport unreliable and expensive but also face the full environmental impact of busier roads on their communities.

Developing transportation infrastructure must mean building roads

Untrue: Public transport represents a major addition to transport infrastructure although the language of transport debate in Dublin distorts the issue, referring to subsidies to CIE as 'losses' and subsidies to road building and maintenance as 'investment'. The DART for instance, has been very successful in attracting commuter passengers who would otherwise have used cars, realising all the efficiency benefits mentioned above such as safety, savings in land requirements etc.

Because of the low population density of Dublin, public transport cannot work

Untrue: In comparison with several major European cities which invest heavily in their public transport systems, population density in Dublin is about average. Indeed, given the extent of congestion that now occurs in Dublin, it is perhaps more accurate to say that population density in Dublin is too high for cars.

THE COMMUNITY WORKERS CO-OPERATIVE

What is the Community Workers Co-operative?

The Community Workers Co-operative is a national network of women and men active at a community level working for social change. It seeks to be an independent voice and to campaign on issues which affect the lives of those with whom its members work.

It aims to be a forum for debate on economic, political, social and cultural issues in Ireland and world-wide. It seeks to promote alternative ways of working, develop the skills of its members and support members who may be in isolated situations within institutions and organisations.

History

The roots of the Community Workers Co-operative date back to the mid seventies when a network of community workers met regularly and held conferences and seminars around the country on a variety of topics. The need for a national organisation was identified and the Co-operative was officially inaugurated in 1981.

Structure

The structure of the organisation reflects the co-operative ethos with a central group of 12 members elected at the annual general meeting with responsibility for implementing policies and meeting the needs of members. Ordinary members are encouraged to be actively involved through small working groups which take responsibility for different aspects of the co-operative's work.

Membership Details

Membership of Co-operative's is open to all who support its aims.
Cost of membership is £15 yearly waged and £3 unwaged.
Members receive free of charge regular newsletter and journal Co-options.

Benefits of Membership

Development skills.
Sharing information and resources.
Exchanging ideas.
Getting support.

Other Publications

Recent publications of the Community Workers Co-operative include:-

(a) *Monthly Newsletter.* This is available free to members and covers a range of issues specific to the field of community work, and of broader concern. It also seeks to provide a news service on upcoming events and on new resources that come available for those working at community level.

(b) *Co-Options on "WORK".* This magazine explores the issues of Employment/Unemployment from a community based perspective. It also critically examines a number of community based responses.

(c) *Co-Options on "WOMEN AND THE COMMUNITY".* This magazine explores the different experiences of women examining both their oppression as women and also their further oppression based on class, ethnic origin and sexuality. It seeks to locate these experiences and struggles in their economic, social and political context. Finally it explores how community work has related to women and their struggle for justice.

(d) *"FRAMEWORK FOR COMMUNITY WORK PRACTICE".* This pamphlet is a position paper prepared by the central group of the Community Workers Co-operative. It examines the role of community work and the community worker in the context of Irish society.

(e) *"WHOSE PLAN?: Community Groups and the National Development Plan".* This booklet describes a campaign led by the Co-op on the National Development Plan which was produced by the Government as a request for new increased EC. Structural Funding. It details the events, describes the response and analyses the issues involved.

(f) *"PARTICIPATION NOT REPRESENTATION: Community Groups and Reformed Local Government"* This report was submitted to the Advisory Committee on Local Government Reform and Reorganisation. It sets out the deficiencies in the present Irish system of local government from the perspective of community-based groups; presents principles which should inform any reform process; and makes practical recommendations for the active participation of community groups in planning development at the local level.

Work to Date

The Co-op has involved itself in debates on the National Community Development Agency, and Community Based Training among other issues. Most recently it has led a campaign by community groups for a say in investment decisions related to EC structural fund grants.

The Co-op has run seminars on Racism, Social Analysis, Community Work from the 1980s into the 1990s, First and Third World Links, Strategies and Tactics and Political Vetting of Community Groups North and South.