



This booklet was compiled in the summer of 1977 by a study group of the Railway Invigoration Society, consisting of:

> R. V. Banks V. G. Christie B.Sc., M.Phil. G. L. Collett T. J. Garrod M.A.

D. F. Ogilvy

The study group would like to thank, in particular, the following members of the Society for their valuable help: Dr. M. P. L. Caton, Messrs. D. Dallaston, R. H. Foster, R. N. Forsythe, D. R. L. Henry, J. S. Hull, M. Mattick and F. H. Neville; and also Mr. R. L. Waite, of the South East Lincolnshire Travellers' Association and Mr. J. D. Rogers of the Cambrian Coast Line Action Group.

Our thanks also to Mr. R. C. D. Edwards for the cover design.

The following abbreviations are used in the text:

BR — British Rail

NBC — National Bus Company

ECOC — Eastern Counties Omnibus Company

CTCC — Central Transport Consultative Committee

HMSO — Her Majesty's Stationery Office

NCC — Norfolk County Council

TUCC — Transport Users' Consultative Committee

Published by the Railway Invigoration Society London September 1977

BM/RIS, LONDON, WC1V 6XX. Phone 01-405 0463.

PRICE 30p

CAN BUS REPLACE TRAIN? or WILL THEY NEVER LEARN?

CHAPTER ONE

BACKGROUND

In August 1963, the Railway Invigoration Society published a booklet by G. R. Croughton called "Can Bus Replace Train? — a commentary on railwayreplacement bus services". This booklet was produced as a response to the "Beeching Plan" (1), which had proposed closure of 5,000 miles of rail passenger services, plus many intermediate stations on other lines, and their replacement by bus services.

The basis of the Society's case was that all the evidence from rail closures which had already taken place showed that bus services were *not* an adequate replacement for rail services. Moreover, in many areas where train services had been withdrawn, the "replacement bus service" had ceased to provide a regular service or had been withdrawn, leaving the area cut off from the rail network.

Notwithstanding widespread opposition by the public, Local Authorities and Members of Parliament, together with the Society and like-minded organisations, the "Beeching Plan" was put into operation, albeit in a less severe form than originally intended. Many rail lines were closed and on others large numbers of intermediate stations were closed and local services reduced or withdrawn.

THE 1968 ACT

The programme of closures continued almost unabated until the advent of the 1968 Transport Act, which introduced the concept of grant aid for the "unremunerative" but socially necessary rail services, on a 1, 2 or 3 year basis. Unfortunately, the basis on which the grant aid was calculated (not purely "avoidable" costs), led to growing concern over the high level of support being paid to British Rail by Central Government. It did not therefore come as a complete surprise to the Society to learn the contents of the Department of the Environment "Blue Book" when it was leaked to the press in October 1972.

This postulated a further extensive programme of closures, with a reduction in the rail network to a "Beeching-type" level. There was, of course, a public outcry and in December 1973, announcing the Government's acceptance of the Railway Board's "interim" strategy for the period up to 1981, John Peyton (the then Minister for Transport Industries) rejected "draconian cuts" in the railway network.

(1) The Reshaping of British Railways HMSO 1963.

THE GREEN PAPER

In 1975, after the new Labour Administration had had a chance to settle in, there were rumours of a new Transport White Paper. The pressure from the public and the rail lobby in particular led eventually to the publication, in April 1976, of a Green Paper — a "Consultation Document" (2) setting out the Government's views and proposals and inviting comment thereon. Three months were officially allowed for comment — most of which, on the pro-public transport side, drew attention to the anti-rail bias inherent in the document.

One of the suggestions in the Consultation Document (Volume 1, para. 7.60) was that consideration be given to "whether a better and cheaper public transport system could not be provided in some areas, by substituting subsidised bus services with an assured future for some local rail services, with the buses inter-linked with the remaining rail services". In response to a parliamentary question by Gordon Bagier MP, on 24th May 1976, a list of services which could be replaced by bus services was given (see Appendix). This list represented the 6% of total passenger mileage accounted for by "Other Passenger Services" in the Consultation Document (Volume 1, para. 7.57), encompassing 2,452 miles of track in England, 641 miles in Wales and 1,117 in Scotland — a total of 4,210 miles! (3).

Although it is extremely unlikely that any Government would try to close some of these lines for political or other reasons, it is important to realise that *no* service shown on this list can be regarded as having a secure future. A further cause for concern is the effect that withdrawal of any of these services might have on longer distance services which share the same tracks.

BRITISH RAIL'S REPLY — AND REPLIES TO THAT!

British Rail, in their response to the Consultation Document (4), also took up the same theme (para. 5.9 and Paper 2 paras. 2.39-2.46) and claimed to be "developing proposals aimed at providing a means of withdrawing a large number of unremunerative services and, by the provision of substitute bus services properly integrated with the main trunk rail network, retaining, and perhaps even strengthening, the contributory revenue to the main network". The Board also felt that "the possible scope for integration, and withdrawal of rail services . . . could lead to a withdrawal of up to 10% of passenger train miles".

Although BR's detailed proposals have never been made public, it is known that they were presented to each of the Transport Users' Consultative Committees and to the Central Transport Consultative Committee in December 1976. In their report (5) on the BR proposals, the CTCC were of the opinion that "railway branch lines are the only source of relief for road traffic congestion now becoming desperate in some areas". Furthermore, they took the view "that the travelling public generally do not find buses to be a satisfactory replacement for trains".

The Committee were also sceptical about the "assured" nature of the replacement bus services, commenting that the "Beeching" replacement buses were considered assured until the then Transport Minister, in May 1969, said they could be withdrawn after two years. They were strongly critical of any (further) acceleration in the procedure for the withdrawal of railway passenger services (a proposal put forward for discussion by the British Railways Board), and doubted whether the possible savings to the Board (£25 million a year, representing only 7% of its total annual passenger subsidy of £350 million) would justify the subsequent upheaval and upset to passengers, which could result in (2) Transport Policy – a Consultation Document (2 volumes) HMSO 1976.

(3) Rail Cuts - a Warning - leaflet published by the National Union of Railwaymen, 1976.

(4) An Opportunity for Change - British Railways Board 1976.

(5) Report on the British Railways Board's Proposals for the Integration and Co-ordination of Some Bus and Rail Services -- CTCC March 1977. considerable passenger resistance.

THE SELECT COMMITTEE

In May 1977, the Select Committee on Nationalised Industries published its first report on British Rail (6), in which, amongst other topics, it gave detailed consideration to "bus replacement of lines with limited potential for additional traffic". Members of the Committee considered this subject the "most sensitive aspect of the future (rail) network", and, after considering evidence from a number of organisations and individuals, were "not convinced that the economic case for substantial bus replacement has been made out. Practical and social difficulties are still greater".

The Committee concluded that "proposals to close down considerable sectors of the provincial railway network and to replace them with buses are neither practicable nor socially defensible".

THE WHITE PAPER

The Government's long-awaited White Paper on Transport (7) has now been published. Although the suggestions for bus replacement first put forward in the Consultation Document are not repeated in such a way as to imply drastic cuts in the rail network, the Government's intention is to proceed with the identification of services "suitable for bus substitution". This much is clear.

They suggest that the Railways Board would "identify services which fell well short of meeting their avoidable costs". Unless the Board judged that the contribution of such a service to the wider network justified maintaining it for that reason, they would notify it to the Secretary of State for Transport. The ultimate decision on rail withdrawal/bus replacement would be taken by County Councils and the right of public objection would be lost, for, as part of the new arrangements, "Parliament would be asked to repeal the provisions under the Transport Acts of 1962 and 1968 relating to the closure of rail passenger services". (!)

"PLUS CA CHANGE ...?"

We now return to the Society's original booklet published in 1963. In April 1977, the Society's Chairman, following discussions with the Secretary of State for Transport, received a letter from a senior civil servant in which he commented on our earlier booklet as follows:

"Although published as long ago as 1963, I was struck by the relevance of its contents to the situtation we face today. For example, the booklet covers many of the problems and difficulties which any proposal to replace local train services with buses must contend. Indeed it is remarkable how the many responses to the Transport Policy Consultation Document have made the same points over the past year that your Society made in 1963 — 'plus ca change . . .!'"

In publishing the present booklet, the RIS is making a fresh appeal to the Government not to repeat the mistakes made in the "Beeching" era. In Chapters Two and Three we give most of the arguments for replacement buses and our answers to them. In Chapter Four we sketch out a few case histories of lines which have closed (and the fate of their "replacement buses") and lines which might be candidates for "bus replacements" in any future cutback. In Chapter Five we discuss the future of buses and trains, giving some positive suggestions of our own.

We hope you will be able to see why we consider a repeat of "Beeching", albeit on a smaller scale, would be a disastrous course of action for this country.

(6) First Report of Select Committee on Nationalised Industries Session 1976/77: The Role of British Rail in Public Transport Vol. 1: Report and Proceedings of the Committee. House of Commons Paper 305-1 HMSO. (7) Transport Policy HMSO Cmnd 6836 June 1977.

CHAPTER TWO

BUSES ARE CHEAPER?

"Buses are cheaper to operate" - this is usually the first argument put forward by those who advocate a bus service to replace a train service.

At first sight, it seems a plausible argument. A certain journey by train costs, say, £50, and the train carries 20 passengers, paying between them, say, £20. If a bus (requiring no guard, no signalmen, no crossing keepers etc.) only costs £25 to operate. then the loss will be cut from £30 to £5. But, this leaves out an important factor. Will all of those 20 train passengers still use the bus?

The evidence, from various parts of the country, is that they will not. The Maiden Newton — Bridport line in Dorset was closed in 1975 and replaced by a bus link. Within a few months, according to a report by the local TUCC, less than a quarter of the ex-rail passengers were using it. (8)

When the Ashford-Hastings line was proposed for closure in 1973, the bus operators admitted, based on past experience in other parts of the country, that they only expected 20% of the original rail passengers to transfer to buses.

The fact that only a minority of former train users turn to the replacement buses is one reason why the latter have themselves so often been subsequently withdrawn or severely cut. Of the replacement bus services introduced in the South West since 1962, less than 40% are still operating (8).

Thus we could find that our hypothetical replacement bus — like the one to Bridport — is now carrying only a quarter of the train passengers, i.e. only 5. It is earning perhaps £5 in revenue and is thus making a loss of £20.

Not only this, but a less easily quantifiable loss would also be made by the community. Those ex-rail passengers not using the replacement bus would either not be travelling at all — at a social cost difficult to estimate — or they would be going by car. In the latter case, the cost to the community would be increased, in terms of congestion, road and car-park construction and maintenance, greater use of fuel, greater risk of accidents. Road maintenance, policing etc. already imposes a heavy burden on the rate and taxpayers. British Rail, by contrast, maintain their own track and provide their own police force.

Replacement bus services could also cause economic problems for the rest of the British Rail system. If a line is closed to passengers, but kept open for freight, the freight service then has to bear an increased proportion of its operating and maintenance cost. In the view of the CTCC (5), this in turn could lead "to its possible review and similar withdrawal".

The Select Committee recently reported (6) that it was not convinced that the economic case for substantial bus replacement had been made out. It also pointed out that the savings in British Rail's wages bill would be very small. (Wages, of course, account for a high proportion of BR's total budget). Closing 10% of the rail network would only cut staff by 1%. After all, the lines concerned are mostly staffed by a minimum of personnel anyway.

The effect on remaining passenger services could also be a bad one. Changing from one mode of transport to another (i.e. from bus to train or vice versa) can be a disincentive, and lead to fewer passengers using the trains on other lines in the area. If the feeder branch line is cut, the main trunk line may begin to wither. (8) TUCC South Western Area: Buses as Replacements for Discontinued Rail Services 1976.

A similar situation occurred on the Lewes-Uckfield section of the Tunbridge Wells-Brighton route. When it was closed, British Rail also suffered a loss because of a falling off of through traffic.

The adverse effect of closures on traffic, and hence revenue, elsewhere was further documented by a Railway Invigoration Society survey in 1966, after the withdrawal of the Gloucester-Chalford service. Our survey revealed that over 70% of former users of the rail service now used other railways much less frequently since their local line had been closed. (10)

A decade later, the situation was much the same. In a study of the effects of a possible closure of the Exeter-Barnstaple line, a transport study group found that such a closure could well cause BR to lose more in contributory revenue than they could expect to save from the closure! "Traffic from the line contributes up to £700,000 (at June 1975 fare levels) in a full year to the Inter City network. This would only need to decrease by about 14%, if the line were closed, to cancel out any savings in cost that closure would bring." (11)

BUSES ARE MORE FLEXIBLE?

Flexibility is another argument brought in by the advocates of buses to replace trains. It is said that the bus can provide a door-to-door service, which the train usually cannot. The bus can, for example, deviate from a main road to serve a nearby village or housing estate. The Kettering-Peterborough bus does this. to serve the village of Woodford. This is one reason why the bus takes 11/2 hours to cover the 30 miles! the Lowestoft-Norwich bus embarks on similar safaris, and takes 1 hour 35 minutes for a trip of just under 30 miles.

This flexibility, if exploited properly, can indeed be a boon on short-distance trips, especially for villagers and estate dwellers wanting to get into their nearest town centre. It makes infer-urban travel, and indeed most travel over 10 miles. tedious and tiring.

The comments in the communications study for the Norfolk Draft Structure Plan are relevant here: "There is evidence that, where bus and train are both available, the bus holds its own up to a range of approximately ten miles, but that beyond this range the train is the preferred mode. The low loadings on some of the longer bus routes (e.g. Fakenham-Norwich; Cromer-Great Yarmouth) seem to indicate that, in the absence of a train service, either more car journeys (whose other terminal is a congested urban area) are generated, or desired journeys are foregone. An element of social hardship is being experienced and any action that would extend the area where this occurs must be avoided." (12)

In other ways, the train is more flexible than the bus. The train can, of course, carry prams, bicycles, parcels etc. The bus either cannot, or cannot do so in large numbers.

The train is able to cope with fluctuations in demand much better than the bus. Imagine a two-car diesel multiple unit working between two towns. Assume that, as on most secondary lines, intermediate stations are unstaffed and tickets are issued on the train. The train would carry about 150 passengers and would be run directly by two men --- the driver and the conductor-guard. (Signalmen, crossing and maintenance staff would be required according to the length and nature of

(9) Problems of Passenger Transport Provision in East Suffolk - V. G. Christie, M.Phil thesis, London, 1974.

(10) Post-closure Hardship Survey – Gloucester-Chalford Railcar Service RIS 1966. (11) Polytechnic of Central London Transport Studies Group – Survey and Review of the Exeter/Barnstaple Railway Service 1976.

line, in varying numbers, of course; but often they would be required in any case for freight working.)

At peak times, the train may be full. To achieve similar capacity, you would need at least two buses — or at least three if these were single deckers. At least two men would still be required to operate them.

In fact, since the bus takes longer to cover the same distance, you would probably need even more vehicles (and therefore drivers) to provide a service of peak-hour frequency comparable to that of the train. It could be that some of these vehicles and crews would stand idle for most of the day.

On the railway, at a busy peak time, a second two-car diesel multiple unit could be coupled to the first one, and the resultant four-car set still worked by one driver — this time probably assisted by two guards. To achieve comparable capacity on buses, one would need at least two more vehicles and drivers.

Of course, the problem of "peaking", with the need to retain idle or under-used stock, and under-employed staff, during off-peak periods, besets the railways as well as bus operators. The solution lies only partly within their control. But our point is that the problem is greatly magnified in bus transport.

PAST MISTAKES WILL NOT BE REPEATED?

Those who propose the replacement of trains by buses sometimes bring in one more argument to back their case. Replacement bus services of the future, they say, would try to avoid the mistakes of the past: firstly by being operated by BR themselves, or by operators under contract to BR; and secondly by being protected by the same statutory procedure as railway closures, that is by the TUCC.

But surely most of the disadvantages of buses mentioned above, and in Chapter Three, will still apply, whoever runs them?

If an existing rail service is replaced by a bus, the CTCC report (5) urges that adequate interchange facilities at rail stations must be provided. This was not, of course, the case with the Beeching cuts. The CTCC report then goes on to say that provision of such facilities would in many cases "entail heavy capital investment". This would have to be set against any apparent saving through withdrawal of the rail service.

Subjecting buses to the TUCC procedure would indeed be an improvement on the present situation, and would undo some of the harm caused by the then Minister of Transport's ruling, in 1969, that bus operators could withdraw replacement services without reference to him, provided that these services had been run for at least two years.

However, the TUCC procedure would, in our view, be a two-edged weapon. Our Society has over the years voiced much criticism of the inadequacies of this procedure; we questioned many of the figures produced at the public inquiries into rail closures and the narrow terms of reference of these. We are so far unconvinced that any TUCC inquiries into proposed bus withdrawals would be any fairer.

In fact, the White Paper has made threatening noises about limiting the powers of TUCCs — which we contend are not wide-ranging enough anyway!

CHAPTER THREE

There are many other reasons why a bus service would be an unattractive alternative to a rail service.

SPEED

The bus normally takes longer than the train. It frequently takes twice as long, sometimes even more than that.

The following table shows examples on a variety of routes in different parts of the country:

Route	Time (in minutes)	
	Train	Bus
Bristol-Weston-super-Mare	24-36	68
Boston-Skegness	33-37	75
Exeter-Plymouth	64-80	144
Hull-Bridlington	37-50	90*
Inverness-Elgin	50	90
Inverness-Muir of Ord	23	36
Ipswich-Bury St. Edmunds	41-44	90-110
Ipswich-Saxmundham	33-35	73
Lowestoft-Norwich	35-48	95
Morpeth-Alnmouth	20-30	85
Preston-Liverpool (local)	57-84	130-140
Preston-Liverpool (express)	53-66	80
Whitehaven-Maryport	29	48
Wrexham-Chester	18-22	45

*Some buses miss out certain villages on this route and therefore take rather less time.

The times quoted are scheduled times: but the bus is subject to traffic congestion in a way that the train is not. British Rail, when planning their timetables, know what else will be on the line at a particular time, and can fit trains into paths — this is the great advantage of a reserved track transport system. A bus operator does not know what else will be on the road at the time when he wants to run his bus.

It is worth noting that Green Line coach services in the London area have recently been severely pruned as they are subject to such serious traffic congestion that they just cannot compete any more.

In some areas, bus lanes have been introduced in city streets to ease the congestion problem — and we have no objection to such measures. However, they are not practicable everywhere, and certainly it is most unlikely that an entire rail replacement bus service could run on bus lanes.

The fact remains: the bus is frequently made unreliable, especially at peak times, because of urban traffic congestion. Therefore the discrepancies between bus and train travelling times quoted above can well be magnified.

COMFORT AND CONVENIENCE

Buses are unsuitable for carrying heavy luggage and cannot carry bicycles and prams in the way that a train can.

The point about bicycles is especially significant in view of the recent success of the scheme to carry cycles free by train. In the first five weeks of the scheme, nearly four times as many were carried as in five comparable weeks in 1976. A clear potential has been shown for people getting around by a combination of cycle and train. This potential could not be catered for by the sort of buses currently on our roads.

Buses also have no toilet facilities, or capacity for carrying invalid chairs — matters of particular importance to the elderly, a disproportionate number of whom rely on public transport.

Perhaps the advocates of replacement bus services would therefore have new buses designed, to incorporate such facilities? If so, what would the cost be?

It has recently been predicted that a new double-deck bus will soon cost £40,000. How will a re-designed one compare in cost with the cost of new diesel multiple units, of similar design to existing ones, for BR?

If new buses are designed, with space for cycles, prams, toilet facilities etc., there are two alternatives. Either they will have to be of lower passenger-carrying capacity — thereby magnifying the problems of fluctuation discussed in Chapter Two; or they will have to be bigger. Imagine the effect of letting loose larger buses on our roads, especially when the statisticians claim that car traffic on them is steadily increasing, bigger and bigger juggernauts are thundering around and essential road maintenance is being restricted by the financial problems of local authorities.

Of course, there are on the roads a very small number of long-distance coaches with toilet facilities. But to introduce these in any great numbers would imply considerable changes in design and production, and would again sacrifice passenger-carrying capacity.

A further inconvenience of the bus is that it is less easy to segregate smokers from non-smokers. Passengers on a single decker, in particular, who do not wish to be enveloped in smoke, are annoyed by this. Those who may be prepared to tolerate such annoyance for a journey of 3-4 miles, would be less prepared to do so over a haul of 20-30 miles.

Other inconveniences of the bus may again be tolerable for short journeys but not for medium or long-distance ones. For instance, bus interiors are usually cramped and do not permit reading and working as readily as does a train. This is a particular disadvantage to business travellers, and, perhaps, to school students wishing to catch up on their homework!

Bus passengers are normally confined to their seats, whereas rail permits movement during the journey. This factor is of considerable importance for people travelling with children.

ROADS

The general riding quality of rubber tyre on tarmac surface (bus) is much inferior to that of steel wheel on steel rail (train). For this reason, bus travel is unacceptable to those who suffer from travel sickness — and all the more so when roads are narrow, undulating and of uneven surface, which most often applies to roads serving the very areas where further rail closures are most likely to be proposed.

For example, in the rural area served by the Marks Tey-Sudbury line, the idea of an attractive bus service to replace it was rejected by the Suffolk County Planning Officer, Mr. Alan Way. In a report quoted by the East Anglian Daily Times (9.6.76), he stated, "the provision of an attractive alternative bus service is almost impossible because of the inadequate road link between Sudbury and Marks Tey." How much more impossible would it be if buses had to be even bigger, to incorporate the extra facilities mentioned above!

In some areas, the railway link is much more direct than the road, and this would be a disincentive to motorists as well as bus passengers. In the flat Fen country, the railway from Ely to March is 15¼ miles; the main road, via Mepal and Chatteris, is 22 miles, with numerous bends. In the contrasting terrain of the South West, the railway from Plymouth to Gunnislake is 14¼ miles — hilly roads connect the two places, via Callington or Tavistock, giving a journey of 19 miles. But for intermediate places on the line, the discrepancy is greater. The village of Bere Ferrers is 7¼ miles from Plymouth by rail, but 14 miles by road — and some of these roads are very minor ones.

At this point, mention should also be made of a study commissioned by the Department of the Environment into the conversion of railways into roads for express buses. (13)

The line studied by Hall and Smith was the main line from Liverpool St. to Colchester, Clacton and Harwich, together with associated branches, with the aim of examining the feasibility of converting it into a motorway for express buses. The cost, at a conservative estimate, was reckoned to be around $\pounds 2,000,000$ a mile.

Visions emerged of buses leaving London "every seven seconds" at busy times, cruising at 90 mph in order to maintain schedules comparable to those of BR. The buses in any such scheme could only be single deckers, unless all bridges over the line were to be heightened or eliminated. Since a railway is narrower than a road carrying the same number of people, more land would be required for the "bus-way".

Goods traffic using the former railway line would presumably be carried by lorries, making their way in between the express coaches. There was also a suggestion of allowing private motorists on to this new road. To prevent head-on collisions, the Department of the Environment apparently considered the idea of a continuous concrete barrier down the middle of the road. Buses and other vehicles would presumably just bounce off it and carry on. "Modern Railways" (March 1976) aptly described the scheme as "Railways into dodgems".

A Hall and Smith scheme applied to a branch line would face similar problems. Since most branch lines are only single track, at least twice as much land would have to be taken up in converting them to roads — unless a complex system of lay-bys and signalling were introduced to enable vehicles to pass one another. One satirical suggestion made in response to Hall and Smith's scheme was for ramps to allow buses to leapfrog over each other on the narrow road!

SAFETY

The safety aspect is another in which the train scores over the road vehicle. The number of accidents per passenger mile is 3-5 times as high by bus as by train; and the amount of serious injuries per bus passenger mile is 20-30 times as many as for train passengers. (14)

Since, as we have already seen, many ex-rail passengers would turn to cars in the event of a line closure, it is also worth quoting the car safety record — or lack ot it! Cars have 8 times as many fatal accidents per passenger mile, and 70 times as many serious injuries, as trains.

Your chances of involvement in an accident of some sort on a road journey are 200 times greater than on a rail journey. In 1976, not one single passenger was (13) Better Use of Rail Ways by P. Hall and E. Smith. University of Reading Geographical Papers No. 43 1976. (14) British Rail Annual Report 1976. killed on a BR train; yet on average 20 people a day are killed on the roads. One is prompted to ask — is a subsidy to the railways worth it, if lives are saved? Or, more bluntly — what is the price of a human life?

ENERGY

On energy saving, the position is more variable — a lot depending on the type of train which is being compared with the bus. To give one example — a bus uses 60% more fuel per passenger mile than a suburban train. (14).

The private car commuter uses 8 times as much fuel as the rail commuter — a point worth bearing in mind in view of the likelihood of many ex-rail travellers turning to cars.

In the longer term, electric transport (which can derive its energy from a variety of sources — coal, oil, water, nuclear fuels, even the wind or tides perhaps one day) is likely to be the most efficient and responsible in fuel conservation. The train is obviously suited to electric operation in a way that the bus and car are not. Where a section of line is not used heavily enough to warrant the capital cost of electrification, battery-operated trains charged while running on an electrified section could be developed. This system already operates on a very small scale at Folkestone Harbour, where battery-operated luggage vans, charged while on the main line, run over non-electrified stretches of line and with technological advances, such as the sodium sulphate battery, branch lines operated by battery powered trains could become a viable proposition.

We would not argue that every threatened line should be electrified. It should be noted, though, that one line which Dr. Beeching wanted to axe (Witham-Braintree, in Essex), has just been electrified because of the increased usage it has enjoyed in recent years. The moral is: don't write off that local branch line!

WEATHER

Buses are more subject to bad weather conditions than are trains. The fact that is runs along a fixed track gives the train a built-in advantage over any road vehicle, in fog, ice, rain or snow.

During a spell of very cold weather in East Anglia at the end of January 1976, the East Anglian Daily Times reported, "Only British Rail of the region's transport systems reported, 'No problems'."

At the Isle of Ely College, Wisbech, students are sometimes sent home early, if there is a fog. The reason? The buses which transport many of them may not get through if they leave it too late!

Further north, problems can become more serious. The railway from Haltwhistle to Alston, on the Northumbria-Cumbria border, was for many years reprieved from closure because of the lack of an "all weather" road. Such a road has now been built, at a cost of £600,000, and the line closed in May 1976. But in the following winter there was snow — and the new road failed to live up to its promise. For about five days, Alston was completely cut off from the outside world.

Similar problems can be experienced in the Esk Valley, which is fortunate to have retained its railway, between Middlesbrough and Whitby. Many times in the winter, the line has shown itself to be a vital communications link when the narrow, steep roads have been blocked with snowdrifts.

CHAPTER FOUR

A closer study of certain closed lines and their "replacement" bus services can be revealing; as can a study of certain lines which might be threatened if some people in the corridors of power have their way.

CLOSED LINES

1. MARCH – WISBECH

Wisbech has a population of some 17,000 (more if one includes adjacent villages which, with the town, form a continuous built-up area). It is almost 8 miles northeast of March, in the middle of the Fens, and was served, up to 1968, by a line from March to Magdalen Road, the trains running through from the latter station to Kings Lynn. One reason for the closure of the line was the high



cost of maintaining a bridge over the River Ouse near Magdalen Road. The March-Wisbech section of the line has remained open to freight.

At the time of closure, there were twelve trains in each direction, taking 12 or 13 minutes for the journey. A replacement bus service was introduced by ECOC — within three years it had disappeared. A local private operator runs a direct bus from March to

Wisbech, taking 35 minutes (i.e. nearly three time as much as the train used to). This service is not very prominently advertised and does not actually call at March station. ECOC run another, less direct and less frequent, service between the two towns — which has, however, recently suffered cuts.

Many students travel to Wisbech to attend the Isle of Ely College and now have to be transported in fleets of buses which cause a lot of congestion in the college entrance and which suffer delay in bad weather. This is one reason why the college supported the RIS is its attempts to get a rail passenger service restored between March and Wisbech in 1974. In answer to this campaign, the then County Surveyor of Cambridgeshire suggested an improved bus service instead — but, in fact, since then, the bus service has simply deteriorated, and so the rail reopening campaign continues.

It may not be irrelevant to note that Wisbech has experienced a decline in population of 3% since losing its passenger service; whereas March, which still has passenger trains, showed a 5% increase over the same period.

2. WYMONDHAM - WELLS-NEXT-THE-SEA

This railway was 32 miles long and served Wymondham (10,000 pop.), Dereham (10,000), Fakenham (4,500) and Wells-next-the-sea (2,300) plus several villages en route. Most trains ran through from Wymondham to Norwich. In 1960 there were 14 trains daily in each direction between Norwich and Dereham, 10 continuing to Wells.





However, the Wells-Dereham service was withdrawn in 1964 and trains from Norwich to Dereham were transferred to Kings Lynn. A replacement bus service from Wells and Fakenham to Dereham station connected with trains but took almost twice as long as the previous rail journey. Thus most traffic from Wells and Fakenham went directly to Norwich by bus, which gave a quicker and cheaper journey.

In 1968, the Dereham-Lynn section was closed, followed in October 1969 by Dereham-Wymondham line. the Closure of the latter was allowed on condition that six daily buses ran to Wymondham station from Dereham. This service took twice as long as the train and fares were higher — hardly an

incentive for ex-rail passengers. Consequently, only a few people used the service and it was withdrawn as soon as possible after the statutory two-year period, leaving one bus on Fridays only. Even that was removed in 1974 and no generally advertised service now exists between Wymondham and Dereham. The service from Wells and Fakenham to Dereham was altered after the Dereham rail line was closed, Wells-Fakenham buses being extended directly to Norwich, leaving only two daily through services between Fakenham and Dereham.

In 1976 there were five daily buses from Wells to Fakenham, continuing to Norwich and taking around 105 minutes, whereas the rail service took 80 minutes over a route 8 miles longer! From Fakenham to Norwich, the ten daily buses averaged 80 minutes, compared with 63 minutes by rail; from Dereham the hourly bus service (two routes) ranges between 50 and 63 minutes, against the train's 40 minutes or less. Between Dereham and Fakenham the buses take 45 minutes; the train took 22. Of these bus services, only Dereham-Norwich is profitable, the others being subsidised by the County Council.

The Wymondham-Wells line served two functions: it joined 4 mid-Norfolk towns to each other and it linked them all to Norwich. Using the speed of rail, it was able to cover the longer distances without unduly prolonging the time to Norwich. The buses have been unable to cover both functions with one service and the four towns have therefore effectively lost their link. Buses direct to Norwich still exist, but are usually a lot slower than the previous train times, even on a shorter route.

Mid-Norfolk is now largely isolated from the national system of public transport. Its total reliance on buses has meant that journeys take far longer, are less comfortable and have fewer facilities than at any time in the last fifty years.

But there is a ray of hope. The Wymondham-Fakenham section remains open for freight and a local action committee, founded by the RIS and working closely with us, is actively campaigning for its reopening to passengers.

3. EAST LINCOLNSHIRE

This line ran from Peterborough to Grimsby, with branches to the coast at Skegness and Mablethorpe. All except the Boston-Firsby section, and the Skegness branch, closed in October 1970 and most was subsequently lifted



13

(except for Louth-Grimsby, which still carries freight). The Peterborough-Spalding section was, however, soon reopened with a very basic passenger service, thanks to a local authority subsidy.

The rail journey from Boston to Grimsby normally took 80 minutes in 1970; some trains, with fewer stops, covered the distance in slightly less.

There is no direct bus between Boston and Grimsby now, except a summer express coach service, taking 190 minutes. By changing at Louth, it is also

possible to cover the distance in 167 minutes travelling time, plus waiting time at Louth, on a stage bus. By changing at Skegness, Alford and Louth, it is possible to get from Boston to Grimsby in 214 minutes' travelling time plus waiting time in between buses.

Travellers also have the option of going from Boston to Grimsby by train, via Sleaford and Lincoln in about 150 minutes - rather less time than the fastest bus on the East Lincolnshire route.

Passengers between Skegness and Grimsby fare little better. An express coach, running once a day in the summer only, takes 113 minutes. The train, including a 5 minute change-over at Firsby, took about 80 minutes. Other bus services. which involve changing, take at least 139 minutes.

One reason for the closure of so much of this line was the high incidence of level crossings, with subsequent high staffing costs. If such rail links are re-instated, the installation of automatic half-barriers, or flashing lights on very minor roads, would do a lot to keep operating costs low (see Chapter 5).

LINES STILL OPEN

1. Hereford-Worcester

For many years there have been rumours in the local press of the possible closure of this line. Beeching first proposed closure in the 1960s; the Castle compromise kept it open.

The line is 29 miles long and double-tracked except for the 7 miles from Ledbury to Great Malvern, Malvern Link and Worcester Foregate Street. Great Malvern serves the Malvern Hills, a favourite pleasure spot of the area.



There are 13 up and 13 down trains at present, including three through to and from London each day. These three have recently been improved: they have been speeded up by as much as 15 minutes in a journey of over 3 hours; and more recent, electrically heated, stock has been introduced.

There are two bus routes from Hereford to Worcester - one via Ledbury and one via Bromyard. The Ledbury route has only two through buses a day; for the rest it is necessary to change at Ledbury and sometimes at Great Malvern as well.

There are six buses in all per day (with variations on market days and Saturdays). The two through buses take 90 minutes, as against 45 minutes by train. There is a better service between Great Malvern and Worcester only — and some extra trains also run just between these two places. For the bus service, however, the recent closure of the Midland Red depot at Malvern is not a good omen for the future.

The Bromyard bus route is slightly quicker (about 80 minutes), with five weekday buses, nearly all running through; but these do not serve the intermediate towns and villages on the railway line. Any replacement bus service that aimed to serve these would have to use the Ledbury route, and thus be more timeconsuming.

There are, of course, fewer buses on Sunday (five altogether), compared with four trains, two of them through to London.

Herefordshire has suffered heavily from line closures in the past, and, in view of their experiences with replacement buses, local people could be expected to resist strongly any further closure proposals. For instance, the Hereford-Ross-Gloucester line closed in 1964 and within four years the replacement bus service had faded away. An ordinary service bus linking the two terminal cities takes about 120 minutes for the 36-mile journey; the trains took between 67 and 90 minutes — timings which included up to 15 minutes' wait at Ross-on-Wye and which could almost certainly be improved upon were the line still open today.

Bus and train timings on other routes from Hereford also reflect unfavourably upon the bus. The 50³/₄ miles from Hereford to Shrewsbury are covered in 70 minutes by train and in 150 minutes by bus. The 24 miles from Hereford to Abergavenny are covered in 28-30 minutes by train, whereas the bus takes one hour.

2. East Suffolk



This line, from Ipswich to Lowestoft, is 49 miles long and served by 10 up and 10 down trains per day, nearly all with good Inter City connections to and from London; plus a few extra trains over part of the line.

In 1965, BR published a formal notice that it wished to withdraw the passenger service, involving total closure of all intermediate stations. The concern which the proposed closure caused to the inhabitants of the county was amply demonstrated by the fact that a total of 1,914 written protests were received by the local TUCC in six weeks.

At the time of the closure proposal, the only through road public transport service between Ipswich and Lowestoft was the twice-daily "East Anglian Express" service between London and Great Yarmouth via Ipswich, Southwold and Lowestoft, mostly following the A12 trunk road. There was no bus link between Beccles, Halesworth and Ipswich; although the relatively frequent ECOC route 264 provided connections between Ipswich, Woodbridge, Wickham Market and Saxmundham, and thence to Aldeburgh. A stage service, no. 50, had operated twice a day betwen Ipswich and Lowestoft in the 1950s, but had disappeared some years prior to 1965. The major gap in the road public transport network was thus between the northern and southern halves of the county, for which the railway provided the only regular link.

It proved impossible to compile a timetable for a replacement bus service that would adequately meet the needs of rail passengers. The fact that two of the principal towns on the line, Beccles and Halesworth, were situated well inland from the A12 made it impossible to provide a reasonably fast terminal to terminal service and, at the same time, cater for all the intermediate stops. A limited-stop service was proposed, with 17 stops between Lowestoft and Ipswich. This, it was suggested, would give an overall journey time of 130 minutes, compared with 80 minutes by rail. It was stated that one of the principal objectives of the bus was to give good connections at Ipswich with London trains — a recognition that the East Suffolk Line was a good provider of contributory revenue to the Inter City service.

Many objectors contended that the proposed timetable was impossible, and to prove their case a group hired a coach to try and simulate a return journey adhering to the proposed schedule. Starting from Lowestoft and making only the 17 prescribed stops, the coach arrived at Ipswich 27 minutes late, missing the rail connection by 17 minutes. On the return trip, it arrived in Lowestoft 40 minutes late, despite good weather and road conditions. The bus timetable, worked out by BR and ECOC experts, was thus shown to be a complete charade and unworkable in practice. The TUCC recognised this when they reported that severe hardship would be caused to rail users if the line were to be shut.

The Minister of Transport, in refusing consent for the closure, stated: "The most severe hardship would occur to users of the Ipswich-Lowestoft rail route because the alternative road services proposed do not offer an adequate substitute, in the light of the volume of passengers to be lifted, the length of journeys involved, and other inherent difficulties."

3. Cambrian Coast (Machynlleth-Pwllheli)

What is known as the Cambrian Coast Line climbs, curls, grinds and occasionally rushes between Pwllheli and Machynlleth, a distance of 57 miles 74 chains, 4 miles of this also being part of the section from Machynlleth to Aberystwyth.

When the line was under threat of closure in 1971, the Department of the Environment called on the Crosville Bus Company to plan an "alternative" bus service. This was done, and a public inquiry held to examine the scheme.

In double quick time, the Welsh TUCC, (who had already said at a previous public inquiry that "widespread hardship" would follow closure of the line) reported unanimously that buses could go no way towards replacing the train service.

After a massive petition, a special train to London with a 1,000-strong march to Downing Street and an extensive publicity campaign, the line was eventually reprieved in July 1974.

To argue that, in particular cases, a bus service could or could not replace a train service seems to imply that train services are valid *only if* peculiar circumstances prevent buses from replacing them. Rail advocates would not argue from this starting point — but this seemed to be the assumption of the powers-that-be at that time. If such a comparative exercise on the Cambrian Coast Line was required, so be it!

The TUCC decision was hardly unexpected. A look at the map of this part of



West Wales will suggest some reasons. Not only is there the question of crossing, for example, the Mawddach river (1¹/₂ miles by train, 17¹/₄ miles by a bus route), but also the generally narrow and inadequate roads, regularly clogged with traffic every summer.

On the question of journey times, consider these examples (bearing in mind that Crosville planned the best bus services they could!):

Towyn-Barmouth by train 31 minutes, by bus 1 hour 50 minutes. Pwllheli-Harlech by train 56 minutes, bus via Porthmadog 87 minutes.

Machynlleth-Llwyngwril by train 48 minutes, by bus 70 minutes.

Fairbourne-Barmouth by train 9 minutes, by bus over 50 minutes.

Then look at costs (1972 figures). Using train day-return fares, the comparison with the notional bus service is interesting to say the least. Machynlleth-Aberdyfi by train 24p, by bus 43p; Barmouth-Harlech by train 29p, by bus 40p, and so on. Only on the Barmouth-Pwllheli run would the

fares have been roughly equal, but this ignores journey time.

Even where the bus runs alongside the railway (e.g. Tywyn-Machynlleth to some extent; Pwllheli-Criccieth), the train wins every time with journey time and cost.

10

Most of Crosville's plans for replacement services were laughed to scorn when it was realised at the Harlech inquiry that one of the three bus services, Harlech-Porthmadog, was to use the Briwfod toll bridge. It had not been realised that 6 and 7-ton single-decker buses would not make it across a bridge with a 2-ton limit.

And just how would buses replace a summer train, crammed with hundreds of people? How would a bus cope with 30 or 40 scouts loaded with hiking gear? The rhetorical questions are endless!

Even in winter, the Wednesday shoppers' trains to and from Pwllheli are often jam-packed as the crowds take advantage of special cheap fares to Pwllheli Market.

The diesel multiple units which operate the service may not be up to Inter City 125 standards, but they provide a much more comfortable journey than the twisting, jolting and lurching of a toilet-less limited leg-room bus stuck behind a caravan.

Finally, let the TUCC speak: "It is felt that a bus service attempting to do the work of the trains, which cater conveniently and simultaneously for local, intersectional and through passengers, would create hardship . . . The Committee are also in no doubt that the holiday trade and other contingent interests, and indeed the area generally, would suffer because people now using the railway to visit the Cambrian Coast would not consider undertaking awkward journeys by rail and road via railheads which are somewhat remote from the coastal resorts."

CHAPTER FIVE

We are not anti-bus. Nor do we contend that the railways should be preserved in exactly their present form for ever.

We want to see a transport system that gets the best out of both buses and trains; and one which also encourages car-owners to use public transport where appropriate. We want to see buses that co-operate with trains rather than compete against them. We do not want to see buses attempting to perform tasks that the train is better-equipped to do, and where the train would attract more passengers if it provided the service.

It is therefore important to identify those tasks which the bus is well suited to perform.

URBAN BUSES

In urban areas, with many stops, the bus is an obvious means of transport, It is, of course, subject to congestion, but bus lanes can sometimes alleviate this. The function of urban bus services is firstly to enable people living in suburbs, outlying housing estates etc., to reach the town or city centre, places of work and entertainment etc.; and secondly to enable people to move with ease around the city centre itself.

The second of these two functions is one that could well be expanded, with frequent city centre buses on a flat-rate fare scale. Such services could encourage car owners not to congest city centres, by giving them a practicable and attractive public transport alternative.

The Centrelink bus in Norwich is such a scheme. It runs every ten minutes during the day, linking the railway station, bus station, hospital and shopping centre. Since its introduction, as an experiment, at the end of January 1977, usage gradually increased from an average of 245 passengers daily to 316 by Easter. Centrelink remains experimental, but the evidence in its first few months suggests that, as more people get to know about it, more are using it. The idea could well be tried in towns and cities similar to Norwich.

At principal railway stations, bus services must be clearly advertised — and here, again, Norwich is a good example, with a plan of bus stops, and details of services, prominently displayed in the middle of the station concourse. Southampton also plans to have a large bus service board erected in the station by courtesy of the County Council. Hull City Transport recently opened an attractive bus information office on the concourse of the city's railway station. Elsewhere, there are towns and cities that could profitably follow this example. Much depends on the attitudes of railway and bus management and county councils, at local level.

Merseyside's transportation policy is to regard the railway as the backbone of its public transport system, with car-rail and bus-rail interchanges. The latter are now in operation at Aintree, Huyton, Leasowe, Maghull, Waterloo and Neston, and are proving very popular. In September 1976, it was reported that their usage was increasing by 50% per year. Car-rail interchanges have also proved popular; all station car-parks more than 4 miles from the centre of Liverpool were made free to rail users in June 1974, and by Spring 1975 the numbers of cars parked had doubled.

RURAL BUSES

In rural areas, if there are no railways, the bus is the only possible means of public transport in most cases. Yet, in many such areas, bus companies have given up routes, or reduced them to one or two buses a day, or even one bus a week.

It is not just bus services to tiny hamlets, or very remote villages, in sparsely populated areas that have faded out of existence. Reepham, Norfolk, with a population of 1,800, has to make do with one daily bus to and from Norwich; plus two extras on Wednesdays and Saturdays only. Incidentally, Reepham lost its rail passenger service in 1952, enjoyed a replacement bus for three months and then the remnants of that replacement bus service for a further nine months — it was not just in the Beeching era that replacement bus links faded away! Dissatisfaction with their almost non-existent public transport services prompted Reepham people, in 1976, to launch a campaign for the restoration of a rail passenger service.

Rural transport has been the subject of many learned meetings, papers and conferences, and some experiments have recently been tried, using various types of "unconventional" bus. The idea has been to minimise costs and/or gain extra revenue from sources other than scheduled passenger services.

We believe that all unconventional bus services in rural areas are worth careful study, though we think some types are more likely than others to be successful.

Postbuses

The postbuses run in several parts of the country have their uses; though how useful they are depends on the extent to which the post office is able to fit its normal commitments into the possibility of providing a service along those routes, and at those times, that most people want to travel. Often such services are of use to pensioners, who have plenty of time to go on a rather circuitous route to their nearest market town during the day; but are of little or no use to commuters for whom time is more important.

Community Minibuses

The community minibus, run by volunteers, has been operated experimentally in lightly populated parts of Norfolk, East Sussex, Northants and Clwyd. It has proved to be of some success in, for example, the villages around Holt, in north Norfolk. A report on the first year of operation there (15) stated that it had just covered its operating costs (the initial training costs for the drivers having been written off) but that "There has always been a problem of finding sufficient drivers capable of passing the public service vehicle test." One is bound to feel that, with the best will in the world, a service that relies entirely on volunteers is more likely to suffer cancellations etc., though this has not so far been a problem in north Norfolk.

The community minibus helps to pay its way by operating evening excursions to nearby towns, and this is worth further investigation by imaginative bus operators. Close links with local people are important — the Norfolk scheme, for instance, is run by a committee of representatives from all six villages served. (We shall look more closely at local community involvement in transport later in this chapter.)

Car-sharing

The volunteer principle of the community minibus is also central to the "neighbourly car-sharing" schemes that are currently suggested by some authori-(15) Village Bus Service — the first year. Report by NCC and ECOC 1977. ties as a means of tackling the rural transport problem.

These we see as being of limited value. Apart from, again, the drawbacks of relying totally on volunteers, there are other imponderables: who decides when the car will run, if there is no timetable? How is a just fare-scale arrived at? What about strangers wishing to visit a village from some distance away? Organised car-sharing would, in our view, need a lot of very careful organising! It may well then be a last resort method of providing transport in very rural areas.

Midibuses

The midibus is a bus seating about 20 people and is the subject of an experiment in the Huntingdon and St. Ives district of Cambridgeshire. The bus is operated by ECOC and has a paid driver. It performs local commuter and shopping functions, a dial-a-bus service and special runs from certain villages to doctors' surgeries. Villagers can also give grocery orders to the driver, who will have these made up at a shop in St. Ives and bring them back on the bus, for a small charge. We are thus approaching a situation where the bus operator also becomes a general carrier, gaining more revenue and providing more diverse services.

The operators report (16) that a particularly successful aspect of the St. Ives midibus has been the provision of a commuter service twice each morning and twice each evening, from St. Ives to Huntingdon railway station. Passengers can pre-book a ten-trip ticket and be picked up at their home; or can board at specified bus stops if they have not booked in advance. The service has become increasingly popular, usage rising from 89 weekly trips in May 1976 to 250 in December. Total numbers of passengers on all midibus services during this time rose from 1,102 per month to 1,860.

A midibus service has also been operating since January 1975 between Lisvane and Llanishen, on the northern outskirts of Cardiff. Because of its size, one 25seater midibus can negotiate residential roads more easily and now provides an attractive service from Lisvane to Llanishen station, about a mile away, connecting with trains into Cardiff. An additional evening peak service has since been introduced.

Other Buses to Commuter Stations

Conventional buses also provide for short-distance trips to the nearest station for rail commuters. At Tilehurst, near Reading, special morning and evening buses specifically for commuters run to the station, and are guaranteed to wait up to 10 minutes in the evening if trains are running late. In Bedfordshire, in September 1976, the County Council agreed to back an experimental commuter bus from the villages of Oakley and Bromham to Bedford Midland Road station; again with the bus guaranteed to wait (for an unspecified time!) if the 17.25 from St. Pancras is running late.

The CTCC report (5) suggests that this sort of idea can be developed further, with more bus services terminating at railway stations on the outskirts of towns and cities.

FUEL

On the fuel front, the short-distance bus is suitable for conversion to electricity if necessary. There have already been experiments with battery powered buses, and in the future we could well see short urban and rural routes operated by such vehicles; whereas, of course, a rail replacement bus service of 20-30 miles could be beyond the practicable range of these.

(16) Rural Midibus Project Phase I ECOC, Cambridgeshire County Council, Northamptonshire County Council 1977.

We could even, in the future, see a return of the trolley-bus on some urban and suburban routes — a number of Continental countries have been less keen than Britain to do away with this means of transport. The Germans are now experimenting with a trolley bus which can also run certain distances on batteries which have been kept fully charged while the vehicle was on the wires.

COACHES

Some coach services compete directly with BR's Inter City links, and it was indeed a condition of BR's offer to consider replacement bus services, that such coaches be withdrawn by the NBC. It is ironical that the latter's subsidiaries so often withdraw bus services from areas which have no other public transport, but run vehicles on routes that are already rail-served.

In June 1977, the County Surveyor of Norfolk, Mr. P. Deavin, attacked the NBC, saying of its policy, "It must be questioned whether it is to the benefit of Norfolk as a whole." Express coaches were being run between Norwich and Thetford, in direct competition with Inter City and local trains. Yet the Watton-Norwich service, where there is no rail alternative, was being allowed to deteriorate.

The NBC understandably stresses cheapness when advertising its express coach services — though the popularity of the Senior Citizen Railcard and the National Union of Student concessions also indicate that BR are attracting the support of at least two of the less well-off sections of the community.

Certainly, the relative cheapness of express coaches must be balanced against the longer journey time and other disadvantages. Advance booking is usually necessary, unlike on a train. Casual passengers are less likely to be refused a place on a train than on a coach. The ticket issuing process can be laborious on a coach. Conditions at terminii are not always satisfactory, with boarding, alighting and waiting passengers not as well segregated from moving vehicles as at a railway station.

One important role of long-distance coaches should be serving routes that cannot easily be catered for by rail. For instance, it makes sense to operate a direct coach link between Norwich and London via Bury St. Edmunds, Sudbury (or Haverhill), Braintree and Epping. None of these intermediate towns has a direct rail link with the rest, and so an express coach link could bring considerable benefits. A similar coach could link Cromer with Wells, Hunstanton and Kings Lynn and then across the northern Fens to Spalding, Bourne and Grantham.

A second role for coaches is, of course, touring. The coach can reach many places that the train cannot. BR themselves, for example, operate coach tours around Snowdonia, for which people are brought in by special excursion trains from many places to Llandudno Junction. BR co-operate with local coach operators to run similar tours of the Cotswolds (by rail to Banbury or Oxford), the Wye Valley (by rail to Newport), Dartmoor (by rail to Exeter), Exmoor (by rail to Taunton) and many other places.

BETTER USE OF RAIL

As was stated at the beginning of the chapter, we are not arguing that railway lines that might be threatened with bus replacement should be left exactly as they are. The policy of our Society has always been the modernisation and development of railways, as well as their retention,

We therefore support operating economies, if these do not lead to a deterioration in the frequency and quality of service, or in safety. Closure of lightly-used level crossings to vehicular traffic, and the replacement of others by

The application of light rapid transit principles to some lines would be appropriate; this is an avenue which the Continentals have explored far more thoroughly than we have, with some admirable results.

The reopening of certain closed lines should also be undertaken, particularly where the so-called replacement bus service has obviously failed; and where new housing and/or industrial development increases the need for improved communications. The RIS suggested such a list of lines in 1974. The CTCC report (5) also advocates "the replacement of buses by rail services, particularly in areas where population spread since 1968 has provided a potential market".

The same, of course, applies to certain closed stations on existing passenger lines. Stations have already been reopened at several places around the country, e.g. Matlock Bath, Shotton Low Level, Baildon, Feniton, Magdalen Road, Needham Market, Ruskington, Metheringham, Muir of Ord, Alness. In other places, completely new halts have been erected to serve new housing or industrial development, as has happened at Lympstone Commando and Sinfin. Nor should we forget new Inter City stations (Birmingham International) and new park-and-ride stations (Bristol Parkway, Alfreton & Mansfield Parkway). The last of these was in fact built to serve an area that had previously lost several stations through Beeching closures. "New stations for old" is an idea that could sometimes be adopted elsewhere. In some cases, a badly-sited station could be closed and replaced by one sited more conveniently.

The opening of new halts is one way in which existing secondary lines — and indeed Inter City lines — can be developed. Another is the greater promotion of services, and attractive fare bargains. In many cases, line usage has increased after publicity campaigns, e.g. local services into Cardiff. The ridership of these went up from 11,400,000 in 1969 to 12,500,000 in 1975. A vigorous campaign by the local rail users' association increased usage at Newmarket station by 30% in 1972. Usage at Newmarket and at most other places in East Anglia, also increased as a result of BR's Paytrain Travel Stamps scheme (giving a 10% reduction to regular travellers) in 1974.

INTEGRATION AND COMMUNITY INVOLVEMENT

A publicity campaign on the Middlesbrough-Whitby line boosted passenger journeys by 100% over three years. In May 1976, a new station was opened, at Gypsy Lane, served by an improved diesel multiple unit service every 20 minutes at peak times, and an interchange point for local buses serving new housing estates. This excellent example of successful development and bus/rail cooperation was spearheaded by the local council.

In Lincolnshire, the County Council provided finance for the reopening of halts at Ruskington and Metheringham. Derbyshire County Council provided money for a completely new service on the southern outskirts of Derby, with new halts at Peartree, Sinfin North and Sinfin Central.

It is not just through local councils that the local community can be proved in the improvement of bus and train services. In many areas, there are local users' associations, which represent the interests of the travelling public on particular rail lines, and which are often concerned with buses as well. Examples are the East Suffolk Travellers' Association, the South East Lincolnshire Travellers' Association, the Cambrian Coast Line Action Group, the East Sussex Rail Travellers' Association and West Norfolk Public Transport Users.

Such bodies (many of which are closely associated with the Railway Invigoration Society) help to publicise services as well as feeding to BR and the bus operators suggestions for their improvement. Well-informed local opinion should be treated very seriously by public transport operators.

The production of joint timetables in specific areas should also be undertaken. This could be done at county level. The same timetable booklet can contain rail services, bus services by the various operators and any ferry services. Leicestershire County Council recently produced such a booklet for its Rutland District.

Plymouth City Council has produced a Joint Services Timetable, whose 88 pages include 14 pages of rail times, including Inter City connections to London, Penzance and Birmingham. Hampshire County Council has published a Portsmouth Area Map, which gives full details of road and rail public transport in the area. In Scotland, the Highlands & Islands Development Board publish annually a booklet "Getting Around the Highlands and Islands" with comprehensive rail, bus, shipping and air timetables.

Travelcards, giving unlimited travel by bus or rail within a given area, are another way of encouraging the best use of both major modes of public transport. Such a facility exists in the Brighton area. For £2.50 a week (£9 for four weeks), the holder has unlimited travel between ten different railway stations in the area and on all buses operated by Southdown and Brighton Borough Transport within the same area. Similar travelcards are available in the Eastbourne area and Rhymney Valley, South Wales.

In this final chapter, we have suggested many things which buses can do well, and could indeed do even better. These things they should be allowed, and encouraged, to concentrate upon; whilst co-operating wherever feasible with the railways, which should be retained and developed.

Within such guidelines, we could see emerging an attractive public transport system that will encourage car-owners to use it where appropriate, thus reducing the bad effects of over-usage of private transport; while at the same time improving the lot of those many people largely or wholly dependent on public transport. Bus and train can thus both help us on the way to a balanced transport system.

APPENDIX

THE THREATENED RAILWAY SERVICES (See page 2)

Shotts-Edinburgh; Ayr- Stranraer; Croy-Stirling-Dunblane; Croy-Falkirk Grahamston-Edinburgh; Kilmarnock-Carlisle (via Dumfries); Glasgow-Aberdeen; Edinburgh-Aberdeen; Glasgow-Dundee; Inverness-Wick-Thurso; Inverness-Kyle of Lochalsh; Glasgow-Oban; Edinburgh-Fort William; Glasgow-Fort William-Mallaig; Edinburgh-Falkirk-Glasgow; Aberdeen-Inverness; Glasgow-Perth-Inverness; Edinburgh-Kirkcaldy-Inverness; Glasgow-Ardrossan; Edinburgh-Stirling-Perth; Edinburgh-Kirkcaldy-Dundee; Edinburgh-Cowdenbeath-Markinch; Montrose-Dundee-Perth; Edinburgh-N. Berwick-Dunbar; Edinburgh-Carstairs; Glasgow-Gourock/Wemyss Bay.

Newcastle-Filey/Hull; Scarborough-Newcastle; Newcastle-Edinburgh; Newcastle-Largs; Newcastle-Blackpool N.; Newcastle-Carlisle; Darlington/Middlesbrough-Whitby; Darlington-Saltburn; Darlington-Bishop Auckland; Newcastle-Sunderland/Hartlepool/Middlesbrough/Darlington/York; Horsforth-Harrogate/York; Micklefield-Scarborough; Knottingley-Goole; Micklefield-Hull (via Selby); Micklefield-Blackpool (via Hebden Bridge); Keighley-Morecambe (via Skipton); Newcastle-York; Kiveton Park-Lincoln/Skegness (via Retford); Cleethorpes/Grimsby-Kiveton Park (via Retford); Cleethorpes/Grimsby-Thorne South (via Doncaster); Manchester-Cleethorpes (via Hope); Thorne N.-Hull (via Doncaster); New Mills-Dore; Manchester-Bridlington; Cleethorpes-New Holland-Barton; Leeds-Sheffield (via Barnsley); Grantham-Boston/Skegness; Leeds-Sheffield (via Rotherham); Sheffield-Skegness (via Nottingham); Leeds-Doncaster.

Nottingham-Grantham/Skegness; Leicester/Derby-Skegness; Cleethorpes-Newark Northgate: Leeds-Cleethorpes; Hull-Scarborough; York-Hull (via Church Fenton): Sheffield-Bridlington/Scarborough (via Selby); Huddersfield-Clayton/Penistone/Sheffield; Doncaster-York; Manchester V.-Wakefield-Scarborough (via York); Scarborough-Sheffield (via Castleford and Barnslev): Leeds/Bradford-Bridlington/Scarborough; New Mills-Sheffield/Doncaster/Barnsley; Manchester/Leeds/Chesterfield-Skegness (via Lincoln); Manchester/Leeds/Chesterfield-Yarmouth (via Lincoln): Sheffield-Lincoln/Skegness; Lincoln/Sheffield/Leeds-Blackpool; Cleethorpes/Grimsby-Sheffield (via Retford); Leeds-Bradford-Morecambe; York-Blackpool (via Hebden Bridge): Cleethorpes/Grimsby-Sheffield (via Doncaster); Sheffield-York; Sheffield-Hull (via Doncaster); Leeds-Harrogate/York; Leeds-Goole; Leeds-Hull (via Selby): Leeds-Scarborough (via York); Leeds-Morecambe (via Skipton).

Manningtree/Parkeston Quay-Harwich; Cambridge-Yarmouth (via Thetford); Cambridge-Norwich (via Thetford); Cambridge-Kings Lynn; Norwich-Peterborough; Ipswich-Norwich; Norwich-Lowestoft; Cambridge-Skegness (via Peterborough and Grantham); Cambridge-Peterborough; Ipswich-Lowestoft (via Saxmundham); Ipswich-Felixstowe; Norwich-Yarmouth (via Acle and Reedham); Norwich-Cromer/Sheringham; Parkeston-Peterborough; Ipswich-Colchester/Chelmsford; Bishops Stortford-CambridgeEly; Cambridge-Ipswich (via Bury St. Edmunds); Yarmouth-Newcastle; Norwich/Cambridge/Ely/Doncaster/York (via Lincoln).

Altrincham-Manchester/Macclesfield/Alderley Edge/Crewe (via Stockport) (Excluding Altrincham-Manchester section); Manchester-Stafford; Buxton-New Mills; Strines-Rose Hill Marple/Marple/New Mills; Bromley Cross-Bolton-Blackburn; Blackpool N.-Preston; Preston-Manchester; Bolton-Preston/Blackpool; Manchester-Crewe section; Manchester-Chester; Allerton-Runcorn-Crewe; Maghull-Ormskirk; Garswood-St. Helens-Wigan; Heswall-Hawarden Bridge/Wrexham; Hooton/Helsby-Chester; Hooton-Chester/Llandudno/Holyhead; Lichfield-Blake Street; Wythall-Henley-Stratford; Coventry-Rugby; Northfield-Redditch; Dorridge-Stratford-on-Avon; Dorridge-Leamington Spa.

Chester-Llandudno/Holyhead; Aberystwyth/Machynlleth-Shrewsbury; Manchester-Chester/Llandudno/Bangor/Holyhead; Stoke/Crewe-Birmingham-Barmouth/Aberyst-Chester/Llandudno/Bangor/Holyhead; wyth; Birmingham-Worcester; Machynlleth-Towyn-Barmouth-Pwllheli; Aberystwyth-Devil's Bridge; Llandudno-Betws-y-coed-Blaenau Ffestiniog; Stockport-Stalybridge; Liverpool-Chester-Bangor; Hooton-Helsby; Liverpool-Blackpool N.; Hawarden Bridge-Wrexham; Manchester-Morecambe; Preston-Ormskirk-Preston: Colne section: Preston/Lancaster-Morecambe; Chorley/Preston/Kirkham-Blackpool: Lancaster/Oxenholme/Kendal-Windermere: Lancaster/Barrow-Whitehaven-Carlisle; Manchester V./Wigan Wallgate-Southport; Liverpool-Runcorn/Crewe; Barrow-Preston.

Leamington/Hatton-Stratford; Birmingham-Llandudno; Leamington-Reading; Wolverhampton-Wellington-Shrewsbury/Chester; Birmingham-Burton/Derby; Derby-Yarmouth; Walsall-Yarmouth; Norwich/Cambridge-Peterborough-Birmingham; Birmingham/Wellingborough-Leicester/Nottingham; Stafford-Nuneaton/Rugby; Lichfield-Birmingham-Kidderminster/Worcester/Hereford/Cheltenham; Birmingham-Reading (via Oxford); Rugby/Coventry-Birmingham/Wolverhampton; Nottingham-Llandudno; Crewe/Matlock-Derby/Nottingham-Lincoln St. Marks/Barnetby; Sheffield-Nottingham; Leicester-Blackpool.

Coryton-Cardiff; Newport-Barry Island; Treherbert/Coryton-Cardiff/Barry Island/Penarth; Rhymney/Cardiff-Barry Island; Rhymney-Cardiff/Penarth; Merthyr-Cardiff/Barry Island; Cardiff-Crewe; Swansea-Carmarthen-Fishguard Harbour/Milford Haven; Swansea-Shrewsbury; Cardiff/Newport-Gloucester/Cheltenham; Newport/Whitland-Tenby-Pembroke Dock; Newport-Cardiff-Swansea/Milford Haven; Milford Haven/Cardiff/Bristol/Weston-super-Mare/Taunton; Severn Beach-Keynsham/Westbury Weston-super-Mare/Taunton.

Bristol-Severn Beach; Bristol-Weston super Mare/Taunton; Paddington/Oxford-Moreton-Worcester/Great Malvern; Bristol/Westbury-Weymouth; Plymouth-Bere Alston/Gunnislake; Plymouth-Liskeard/St. Austell/Penzance; Liskeard-Looe; Plymouth/Par-Newquay; Truro-Falmouth; Penzance/St. Erth-St. Ives; Exmouth/Plymouth-Exeter-Newton Abbot-Paignton; Plymouth/Paignton/Exmouth/Exeter-Barnstaple; Exeter-Exmouth; Exeter-Salisbury; Worcester-Great Malvern/Hereford; Bristol-Gloucester/Cheltenham/Worcester/Great Malvern; Swindon-Gloucester-Cheltenham-Worcester/Hereford; Swansea/Cardiff-Portsmouth; Cardiff/Bristol-Westbury-Salisbury/Portsmouth; Cardiff-Weymouth. The Railway Invigoration Society, founded in 1954, campaigns for the retention, modernisation and greater usage of Britain's railway system. There are Branches or Area Representatives of the Society in most parts of the country. Many local authorities and voluntary organisations are corporate members. If YOU believe that a modern, efficient and well-used rail network is vital, JOIN US.

SUBSCRIPTIONS are moderate and there are special rates for individuals under 18 and over 65 and for registered students:

Enquiries to:

RAILWAY INVIGORATION SOCIETY BM/RIS LONDON WC1V 6XX. Telephone 01-405 0463.