BUS DEREGULATION IN GREAT BRITAIN: A REVIEW OF THE FIRST YEAR

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The views expressed in this report are not necessarily those of the Department of Transport

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BUS DEREGULATION IN GREAT BRITAIN: A REVIEW OF THE FIRST YEAR

ABSTRACT

The quantity control of bus services in Great Britain (outside London) was abolished a year ago, and local authority financial support became subject to competitive tendering. While the transition to the new regime is now complete, bus services are still undergoing continual change. Immediately after deregulation, the number of vehicle miles was some four per cent higher than in 1985–86, although there were significant increases in some places and decreases in others—particularly in the metropolitan areas. In the subsequent year there has been further, steady growth, amounting to nine per cent overall. The rate of change of fares has generally been unaffected, except where fares have been reduced in response to competition, and in metropolitan areas where they have risen as a result of expenditure limits imposed on Passenger Transport Authorities. Early passenger statistics (to March 1987) indicate a slight decline in patronage in non-metropolitan areas since 1985–86, and a more marked one in metropolitan areas, reflecting public dissatisfaction with the changes there. The effect on patronage of service improvements since April 1987 is yet to be measured. Bus service subsidies have increased during the year, but are still at a lower level than before deregulation.

1 INTRODUCTION

Bus services in Great Britain (except in London) have now been deregulated for a year (since 26 October 1986). This report describes and assesses the impact of deregulation (and other relevant provisions of the Transport Act 1985) over the first year, and the transitional period preceeding it. It is based on the results of research carried out by TRRL, in association with the Scottish Development Department and the Welsh Office. The material collected in the course of the research programme has yet to be fully analysed, and more will be gathered as developments during the second year are monitored. This is therefore an interim report, superseding the TRRL report (Balcombe et al, 1987) written immediately after deregulation. Like the previous report, this is a summary of TRRL’s research findings, which are discussed in more detail in separate reports (those already published are listed in section 10).

This report begins (section 2) with an overview of developments in bus services over the whole country, and consequences for passengers and public expenditure. This is based on statistical analysis of information derived from bus service registrations, on information obtained through discussions with local authority officers, and other sources. Section 3 describes the results of area studies, which are in progress in a number of places in England, Scotland and Wales, through research contracts or as joint TRRL-PTE research programmes. Section 4 discusses the way operators have reacted to deregulation and how competition is developing. Section 5, 6 and 7 cover innovation, safety and maintenance and future prospects; conclusions are presented in section 8.

2 NATIONAL OVERVIEW

2.1 SERVICE CHANGES

Overall changes in bus services at deregulation in October 1986 and during the following year are the result of several distinct phases of activity. First, operators decided what services they would run without subsidy from October. Then local authorities determined what additional services were necessary to provide adequate public transport in their areas, and let contracts with operators, mostly by competitive tender, to run them. The resulting pattern of changes was maintained (with some changes being allowed for special reasons) until 26 January 1987, when operators were free to introduce new services and alter or cancel those already running. Local authorities, in turn, have since been responding to these changes by making appropriate adjustments to subsidised services.

In the initial phase, the equivalent of some 85 per cent of previous services were registered as commercial (non-subsidised) services. There was however, great variation in the proportion so registered throughout the country: fewer commercial services were registered in areas where previous levels of subsidy had been higher, for example in rural and some metropolitan areas, although this factor explains only part of the variation. Some services were not registered at all, while others were registered to run only at times of high demand and not, for example, in the early morning, late evening, or on a Sunday. In some areas commercial services were on completely new patterns, bearing little or no resemblance to previous networks.

Local authorities generally adopted the policy of subsidising non-commercial services so as to reproduce previous patterns of service, or, where it was impracticable to achieve this in detail, to provide broadly equivalent levels of service. There were varying degrees of technical difficulty, generally more acute in large urban areas with complex public transport networks, and especially where radically
new commercial networks had been introduced, and considerable uncertainty about the costs which would be incurred. Nevertheless most authorities achieved their objectives, in many cases with substantial savings in subsidy (see section 2.5 below). A rough indication of the degree to which previous services were replaced may be derived from the change in the total number of vehicle miles, which is estimated (from bus service registrations and statistical returns) to have been about four per cent higher immediately after deregulation (November 1986) than the corresponding figure for 1985–86. Some of this increase (about three per cent) seems to have occurred during the transitional period as operators adjusted services in anticipation of deregulation.

That is not to say that there were no significant changes. In many cases it proved impossible to devise subsidised services which exactly replicated previous services, or parts of services, which had not been registered as commercial: to do so would have required inefficient operational schedules for operators, or unacceptable competition between subsidised and commercial services. In such circumstances authorities were obliged to settle for overall service levels similar to, but not exactly the same as, those provided before. Further, during the process of designing new networks, several authorities identified previous services which carried very small numbers of passengers, which were not therefore judged to be good value for money (even though in most cases budgetary constraint did not prove crucial), and which were not therefore replaced. In some metropolitan areas the initial replacement of non-commercial services proved less satisfactory, for various reasons discussed in section 4.3.1.

Conversely services improved in many places. This is partly because authorities now have more say in what they subsidise, and partly because of new commercial services, including some which are in competition with others and some which are now operated with minibuses at higher frequencies than before.

Inevitably there has been a certain amount of disruption as new patterns of service were introduced, due largely to unfamiliarity on the part of the public and bus operating staff, but in most places it was neither severe nor prolonged. Apart from adjustments made to overcome such problems, the situation remained fairly static until 26 January 1987. There was no dramatic change on this date; it simply marked the start of a steady process of change. The rate of changes to registrations (relating to new services, cancellations and adjustments) is now running at approximately double that under road service licensing before deregulation (comparing May and June 1987 with the same months of 1984). This is a substantial increase but not unexpected in view of the novelty of the conditions under which the industry now operates. Various types of change are taking place. Commercial services are being adjusted (sometimes involving major revisions of whole networks) better to match demand and improve operators' commercial positions, sometimes in response to competition. To a lesser extent, contracts for subsidised services are being terminated either because operators are losing money on them, because authorities are not satisfied that the demand warrants continued subsidy, or because new commercial services render them unnecessary. Local authorities are letting new contracts to compensate where necessary, for changes of this kind, or to correct defects in originally devised subsidised services. Operators are taking new commercial initiatives.

The net effects of these types of change vary considerably from place to place, and may only be evaluated in detail for a limited number of study areas. Overall, however, there has been considerable growth in levels of service: nationally the number of registered vehicle miles increased by nine per cent between November 1986 and November 1987. The number of bus miles operated per day (outside London) is provisionally estimated, using information from registrations to project results from statistical returns, to have been some 13 per cent higher in November 1987 than the average for 1985–86, the last full year before deregulation. There has been growth in every region, but it has not been uniform over the whole country (Figure 1). Furthermore, there has been growth in services operated on all days of the week, and at all times of day (Figure 2), suggesting that local authorities have, on the whole, been able to counteract cuts in services running at unprofitable times. The growth in metropolitan counties between November 1986 and November 1987 (13 per cent) was slightly higher than the national figure, but followed an initial decline of about five per cent, resulting in a net increase of about eight per cent from the pre-deregulation level. Elsewhere, there was an initial increase of about eight per cent, followed by an increase of seven per cent between November 1986 and November 1987, giving a total change of about sixteen per cent.

### 2.2 FARES

In attempting to assess the impact of deregulation on fares, it is important to recognise that in metropolitan areas authorities were obliged to impose substantial fare increases in order to contain their expenditure within newly prescribed limits. These increases, which masked any effects solely due to deregulation, are described in section 3.2.2. Even in the non-metropolitan areas, where this complication did not arise, it is difficult to say whether deregulation affected fare levels. Operators tend to revise their fares at irregular intervals, and it is not possible to determine whether a particular increase was caused, hastened or delayed by deregulation. On the whole, it is probably fair to say that there has been little change, though there are a number of exceptions.
Information from local authorities suggests that deregulation has had little effect on fares in non-metropolitan areas. In most counties, fare increases have been broadly in line with inflation, but both higher and lower increases have occurred.

There are perhaps a score of instances, spread over eleven counties, where general fare increases have not been applied in particular locations, and one instance of an actual fare cut. These exceptions have been the result of competition, with operators attempting to undercut each other's fares. In most cases the reductions, or delayed increases, have been short lived.

Some local fare competition is evident in Scotland, but generally price movements there are in line with inflation. The larger operators have however put much effort into promoting multi-journey and travelcard discount tickets, particularly in more urban places.

Many passengers are affected not simply by changes in standard fares, but by changes in the price and availability of special fares through concessionary schemes and discounted pre-paid tickets. Changes to concessionary fare schemes have generally been of a minor nature, but beneficial to passengers. The most common change is the addition of new categories of eligibility, as defined by the Act. However with increasing numbers of operators providing local bus services, passengers have been finding that they cannot always take advantage of pre-paid tickets. The most widespread problem is with simple return tickets, often where outward and return journeys are made using services run by different operators (typically where established operators run commercial day time services, but new operators have run evening services under contract). Some county councils have negotiated special arrangements with operators under which they accept each other's tickets, but they are in the minority. In many places, particularly large urban areas, passengers have a wider choice than before, but individual multi-ride tickets or travel cards may be more restrictive, as many are now exclusive to particular operators. Some examples of this type of problem are discussed in section 3.2.3.

2.3 EVALUATION OF CHANGE

In most areas services are better in some places and worse in others, and it is difficult to form an objective judgement on whether the gains outweigh the losses. Where comprehensive, detailed information is available (for example in the study areas) it is proposed to apply quantitative methods of evaluation. Elsewhere, the very broad picture obtained from aggregate statistics may be supplemented by the judgements of county and regional transport officers, based on their local knowledge and professional expertise. Their opinions (given, in discussion, to TRRL) are represented in figure 3. Just over 40 per cent believed that on balance services in their areas had improved, while just over 20 per cent felt that services were worse; in most cases the changes, whether positive or negative, were only marginal. About one third of transport officers thought service levels were unchanged, or were unable to form a judgement. Views on whether bus services now represent better or worse value for money (for local authorities) were divided in about the same proportions, although many were concerned at the prospect of increasing costs in the medium term.

Fig. 3 Transport Officers views of results of deregulation in non-metropolitan areas

It is arguable, however, that passengers may be better judges of the merits of bus services, but it is both expensive and difficult to gauge their opinions accurately. Spontaneous expressions of opinion (such as letters to newspapers and complaints) are more likely to be made by dissatisfied rather than satisfied passengers, and cannot therefore be regarded as properly representative. This type of bias may be reduced if not entirely eliminated, by means of
systematic surveys. A further problem lies with the timing of surveys; if they were conducted too soon after deregulation, passengers, and in some cases operators, may not have adapted to new service patterns, and views expressed may relate to temporarily unsatisfactory situations; on the other hand, if surveys are delayed until transitional problems have been resolved, passengers may not accurately remember the quality of services before deregulation. The first of these problems probably accounts to some extent for the generally unfavourable reactions of those questioned in the TRRL surveys in metropolitan areas early in 1987 (see section 3.3), perhaps to a lesser extent for the results of similar surveys in Scotland a month or two later, and may have influenced the first reports to Buswatch (Guiver and Turner, 1987).

Fifteen per cent of some 1400 bus users surveyed in Scotland said that they used buses less often than before deregulation; only nine per cent use them more. Despite this, the number of Scottish respondents to the survey, and particularly those in more rural regions, who felt that the service changes were improvements exceeded those who perceived deterioration. This is to be expected in the urban regions (where there were increases in the levels of service, albeit on a smaller scale than in Glasgow), but is perhaps surprising in the rural regions where on the whole services did not change a great deal.

As anticipated, better weekday bus frequencies were perceived favourably and off-peak reductions unfavourably. It is also encouraging that the balance of bus users’ opinion was markedly favourable about the changes in destination choice and journey convenience, which suggests that the operators have fulfilled at least in part the aim of the legislation to stimulate a better matching of supply and demand. Service quality attributes such as crew helpfulness, ‘getting a seat’ and the availability of service and timetable information have also produced more satisfied than dissatisfied customers.

The Scottish Office Survey is the only one currently available which comprehensively covers a region of the country, though there are plans to survey England and Wales in a similar way. It would be dangerous to draw any firm conclusions about the whole of Great Britain from the Scottish survey, since the rural parts of Scotland are very much more remote, and the urban areas have undergone greater changes in bus services than those in England and Wales. Nevertheless, there are indications that the generally unfavourable opinions of deregulation which were found in the PTEs might be less extreme elsewhere.

As regards the remainder of the country, there are a few localised studies. Reports from the TRRL case study areas indicate that competition seems to stimulate an improvement in image. Two new independent operators were reported as ‘friendly’ and cleaner than their NBC rivals, one of whom however is described as ‘business like’. Another established operator became more reliable and ‘smartened up their ideas’ after facing competition, and even passengers who remained loyal admitted that services had improved.

In Barrow, competition between the municipal operator and an NBC subsidiary (Ribble) has resulted in a growth of minibus and midibus services in the town, but services have been reduced in areas further away from Barrow where there is no competition, resulting in complaints from local councillors. Passengers appear to like the smaller vehicles, and appreciate the higher frequencies, but there are complaints about lack of luggage space. These findings are echoed in a survey in Plymouth (Green and Pope, 1987) where a number of routes now have high-frequency minibus services, and in reports from Buswatch (Guiver and Turner, 1987), which also found problems with passengers having to stand or finding buses full.

The main concerns of Buswatch observers are uncertainty caused by changes to services and timetables, and failure of services to keep to the timetables. The survey reported a fall in perceived reliability (buses running to time) from 64 to 54 per cent; actual reliability, from observations of arrival times, fell similarly, though from a higher level of 78 per cent, indicating that buses keep to time better than people think. Buswatch reported a general decline in cleanliness, comfort and staff helpfulness since deregulation, which contrasts with the TRRL Case Study findings in areas where there is competition.

In general, then, it could be said that people in PTE areas found bus services less satisfactory after deregulation; they were seen as uncertain and unreliable, and many people suffered reductions in service. Scottish passengers, particularly in rural areas, reacted more favourably. The same problems occur in some other parts of the country where reductions in service have been made, but where there is competition there appears to have been a positive step towards brightening up the image of the bus service. Minibuses are generally favoured by the public, despite some problems with luggage space and carrying capacity.

2.4 PATRONAGE

In the final analysis the best indication of the value of bus services is the number of passengers who use them. Provisional estimates of numbers of passenger journeys in 1986–87, based on operators’ statistical returns to the Department of Transport, are shown in table 1 below, together with the corresponding statistics for 1985–86. (In making comparisons between these statistics, note that those for 1986–87 include only five months—November to March—during which local bus services were deregulated).
TABLE 1

<table>
<thead>
<tr>
<th></th>
<th>1985–86</th>
<th>1986–87</th>
<th>% change</th>
</tr>
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<tbody>
<tr>
<td>LONDON</td>
<td>1152</td>
<td>1168</td>
<td>+1</td>
</tr>
<tr>
<td>METROPOLITAN COUNTIES</td>
<td>2069</td>
<td>1811</td>
<td>-12</td>
</tr>
<tr>
<td>REST OF GREAT BRITAIN</td>
<td>2421</td>
<td>2348</td>
<td>-3</td>
</tr>
<tr>
<td>GREAT BRITAIN TOTAL</td>
<td>5642</td>
<td>5328</td>
<td>-6</td>
</tr>
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</table>

(Source: Department of Transport, 1988)

Ignoring London (where services were not deregulated) there was a decrease of seven per cent in the total number of passenger journeys; this decrease was most marked in the metropolitan counties (12 per cent) and smaller elsewhere (three per cent).

More detailed analysis of the statistics for the metropolitan counties reveals that the number of passenger journeys made in the seven months (April—October) of 1986 before deregulation was seven per cent less than a similar fraction of the total recorded for 1985–86. This change was largely attributable to the fare increases made in April 1986 (see section 3.2.2). However, the decline in journeys between 1985–86 and the post-deregulation part of 1986–87 (November to March) was 19 per cent. This seems to have been due in part to further fare increases, confusion about new patterns of service, and reductions in levels of service (see section 3.1), some of which were temporary. It remains to be seen how the resolution of initial operating problems and the subsequent restoration of levels of service may have affected patronage in the longer term.

The smaller decrease in patronage in the non-metropolitan areas appears consistent with the smaller changes in service levels (generally positive), and fare increases not noticeably affected by legislation. Statistical returns from operators in these areas are not sufficiently detailed to allow the estimation of separate patronage figures for before and after deregulation in 1986–87.

While the decrease in patronage immediately following deregulation cannot be ignored, it is legitimate to enquire how much of it is due to transient effects, how much to external factors influencing demand, and how much to permanent changes in public transport resulting from legislative change. Several more years’ statistics will have to be analysed before this question can be answered with any confidence.

2.5 SUBSIDY

At this stage it is not possible to make a definitive assessment of the effect of deregulation on bus subsidies: out-turn expenditure figures for 1986–87, which was in any case a hybrid year, are not yet fully available; 1987–88, the first full year since deregulation, has still five months to run, so that any estimates are of a very provisional nature; and expenditure has been switched between various heads in local authority accounts, complicating the process of comparison. Further, while the main concern is with expenditure on contracted local bus services, various secondary effects, for example on concessionary fare schemes, education transport budgets and administrative costs should also be taken into account. In some areas the situation is further complicated by costs resulting from the formation of Public Transport Companies.

2.5.1 Non-metropolitan counties, England

The latest available financial information from local authorities indicates that a total of £86.7 M was spent on bus revenue support in 1985–86 (£71.7 M by county councils, £15.0 M by district councils), the last complete financial year before bus deregulation. The amount budgeted for the current financial year (1987–88) is £74.8 M (£63.8 M counties, £11.0 M districts).

TRRL discussions with county council transport officers have suggested that although the initial savings reported early this year are being eroded, as counties let contracts to replace commercial services which have been withdrawn, most councils are expected to contain revenue support within their budgets in this financial year, with little if any loss of services. Thus, for 1987–88, county council revenue support should be below £63.8 M. In four counties (Dorset, Hertfordshire, Oxfordshire and Wiltshire), district councils contribute to revenue support in accordance with formal agreements with the county councils. Otherwise district councils provide revenue support in a very minor way, topping up the county-supported networks where they (but not the county councils) perceive needs, often making use of the de minimis provision of the 1985 Act. Information on district council spending is incomplete, but seems to indicate that it will be of the order of £2.5 M–£3.0 M in 1987–88: much less than budgeted. The total revenue support in English counties will probably turn out to be about £60 M–£65 M for 1987–88, substantially less than 1985–86 expenditure, even without allowing for inflation.
Increased expenditure is expected over the next few years as further adjustments are made to commercial services, contract prices change and rural bus grant, amounting to some £12 M in England in 1986–87, is phased out. At present quantitative information is too patchy and contradictory (there have been both rises and falls in contract prices) to make a confident forecast.

The 1987–88 budget for concessionary fares is £72.6 M (£12.5 M counties, £60.1 M districts) compared with an expenditure of £63.8 M for 1986–86. This increase may be due to expectations of fare increases, to the transfer of compensation paid to operators for discounted children’s fares from revenue support to concessionary fare schemes, to the creation of new schemes or extension of existing ones to new areas, new categories of concessionaire and, perhaps, to contingency provisions. However, there are early indications that as some authorities revise schemes to comply with the provisions of the 1985 Act, particularly in relation to generated travel, actual compensation paid to operators is less than anticipated. It would not therefore be surprising to find the 1987–88 budget underspent.

The interaction between public transport and education transport (including contracted services exclusively for the carriage of children to and from schools, and the provision of scholars’ season tickets valid on local bus services) is complex and varies from place to place, and at present insufficient information is available for a systematic assessment of the consequence of the 1985 Transport Act. However, discussions with local authority officials suggest that more attention is now being given to joint optimisation of public and school transport, and that in some areas the new discipline of letting contracts by tender is permeating the process of providing school transport. Overall savings are therefore to be expected in the longer term, although they may not be obvious at this stage.

Authorities have taken on additional staff to cope with work generated by deregulation. Although many were appointed on short-term contracts, there now seems to be a general move to make appointments permanent, since substantial effort is still required for tendering subsidised services, and more attention is being given to longer-term activities like monitoring services and improving publicity. At present there are about 150 additional staff in county councils, requiring increased expenditure of the order of £3 M/a. Expenditure on publicity varies enormously between counties, ranging from virtually nothing up to about £1 M/a. At this stage, with only patchy information and a changing situation, one can only guess at a likely total—perhaps between £5 M and £10 M/a.

2.5.2 Wales

The overall picture in Wales is very similar to that in England, albeit on a smaller scale. Estimated expenditure by counties and districts on revenue support in 1985–86 was £10.8 M. The budget for 1987–88 is £8.3 M, and is unlikely to be fully spent.

2.5.3 Scotland

Revenue support is reduced from pre-deregulation levels in almost all regions. This conclusion can be stated despite difficulties arising from the definition of costs and their comparison over time. The best estimate that can be made at present for the whole of Scotland is that revenue support requirements reduced from about £27 M to £15 M per annum in the period immediately following deregulation.

2.5.4 Metropolitan areas, England

The changes in metropolitan areas, which include the reformation of the PTAs and PTEs and the establishment of new bus operating companies, were more complex than those occurring anywhere else; further, they were constrained by centrally imposed expenditure limits. This complicates any comparison of levels of bus subsidies before and after deregulation, and prevents identification of effects due solely to deregulation. Payments now being made by PTEs to bus operators for services provided under contract total some £70 M/annum. This is less than half the PTEs’ previous net expenditure on bus operations (approximately £210 M/annum), but subsidy is not separately identifiable within that figure, which includes other items of expenditure—for example planning, administration of contracts and provision of information for the public—which are still borne by the PTEs. A further complication is the establishment of separate bus operating companies, which has entailed substantial costs, both recurring and non-recurring, for the PTEs. The net cost reduction is therefore considerably less than these figures might seem to imply. The cost of concessionary fare schemes rose from £105 M in 1985–86 to about £130 M in 1987–88, partly because, as elsewhere, schemes were extended to new categories of passengers, but mainly because of fare increases (see section 3.2.2). Finally, as in other areas, the cost of education transport has been affected.

TRRL’s research programme includes analysis of all these factors, but is not yet complete; some necessary out-turn figures are still outstanding. The results of this analysis will be published in due course, in separate reports on the metropolitan areas.
3 DEVELOPMENTS IN STUDY AREAS

The picture presented in the previous section is, because of its breadth, necessarily limited in depth; aggregate statistics may describe the national situation, but more detailed examination is required to explain it. A number of places were therefore selected for more detailed study of the factors influencing bus services, the resulting changes and their effects on passengers. To allow collection of relevant information before deregulation (to provide a sound base against which to measure change), these study areas had to be selected well in advance, with no knowledge of what was to happen in them. The selection was made in the hope that it would eventually provide a representative cross-section of developments across the country, and in this respect it has been largely successful. The study areas include parts of four English counties, five of the six English metropolitan areas, one Welsh county and parts of two others, and two Scottish regions and parts of three others.

Interim reports by research contractors or individual non-metropolitan study areas have been published by TRRL (see section 10 for references) and summarised in a TRRL report (Rickard et al, 1988); reports on metropolitan areas and Strathclyde are in the course of preparation. The main findings of all these reports are presented in the following sections.

3.1 SERVICES

The study areas are listed in Table 2, together with some statistical information. The wide variation in the proportion of previous services initially registered as commercial is evident. This variation is the product of a number of factors, including whether areas are predominantly urban or rural, the extent to which services were subsidised in the past, and the amount of competition between operators. Thus there was a high proportion of commercial registrations in the Nottingham area, which has an extensive rural component, but where the bulk of bus services run in urban areas. In Strathclyde, intense competition in urban areas, with many new commercial services, outweighed the low level of commercial registrations in outlying parts of the region like Argyll and Bute. Commercial registrations were at particularly low levels in predominantly rural places like Powys and Dumfries and Galloway, but rather higher in Highland Region, perhaps as a result of competition there. The situation in Metropolitan areas was affected by uncertainty on the part of Public Transport Companies about the policies likely to be adopted by the new authorities; some appear to have made incorrect assumptions about the volume of contracts they might win for subsidised services, and adjusted their resources accordingly, thus limiting their ability to provide commercial services. (See Section 4.3 for a full discussion of operators' strategy).

The pattern of commercial services was much like the national pattern, with gaps at the ends of the day, on Sunday and on rural routes. Some operators made major network revisions, presumably to strengthen their commercial positions by improving services on profitable routes, or establishing commercial services over the whole of their areas and thus increasing the difficulties facing potential competitors. The Medway towns are one example of this kind of development. Here, urban services were redesigned to run mainly on radial routes to and from the town centre, (replacing the former cross-town services) at enhanced frequencies with some conversion to minibuses. In Leeds, Yorkshire Rider (the Public Transport Company) completely redesigned the network to give maximum area coverage with the minimum vehicle mileage. Greater Manchester Buses also produced a new, reduced, network in which two-thirds of services were new. In Tyne and Wear, a number of new services were introduced providing direct services to the city centre, in contrast to the previous pattern of feeder services to the Metro.

Most authorities, with the notable exception of Greater Manchester, succeeded in letting contracts for sufficient services to make good the deficit in commercial vehicle miles, or nearly so. There were, nevertheless, significant changes in the pattern of services in some places, particularly in the larger urban areas where the technical difficulties of designing complementary subsidised services proved most acute. Detailed differences between new and old services were therefore inevitable. In most areas the overall mileage figure is the result of service reductions in some places being partially off-set by new services in other places; for example, in Tyne and Wear the mileage operated after deregulation comprised about 90 per cent of the previous services, and new services, amounting to about six per cent, effectively duplicated previous services which continued. The worst examples of deficiencies in the new networks occurred in Greater Manchester and Leeds, where most commercial services were new. In the latter case considerable reiteration in the design of both commercial and subsidised networks was required before a satisfactory solution could be achieved some time after deregulation, and the public suffered in the meantime. There were also problems where services were not operated as registered, because new, theoretical schedules proved impracticable (as in the Medway towns where insufficient allowance was made for the effect of traffic congestion on running times), staff were inadequately trained to operate new services (some Lancashire services were unreliable at first for this reason), or operators found their resources were insufficient for the services they had registered. A spot check made by Merseyside PTE in December 1986 revealed that 20 per cent of subsidised services were not running at all. Merseybus (the new PTC) seem to have underestimated the number of contracts it could win, and consequently reduced
TABLE 2
Bus Services in Study Areas
(Registered vehicle kilometres expressed as percentage of pre-deregulation values)

<table>
<thead>
<tr>
<th></th>
<th>Initial commercial services</th>
<th>All services</th>
<th>1/NOV/86</th>
<th>1/MAY/87</th>
<th>1/NOV/87 (est.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LANCASHIRE</td>
<td>70–75</td>
<td></td>
<td>96</td>
<td>na</td>
<td>na (1)</td>
</tr>
<tr>
<td>MEDWAY</td>
<td>112</td>
<td></td>
<td>127</td>
<td>122</td>
<td>117</td>
</tr>
<tr>
<td>NOTTINGHAM</td>
<td>95</td>
<td></td>
<td>100</td>
<td>103</td>
<td>104</td>
</tr>
<tr>
<td>WILTSHIRE</td>
<td>79</td>
<td></td>
<td>c100</td>
<td>na</td>
<td>na (1)</td>
</tr>
<tr>
<td>CLWYD</td>
<td>52</td>
<td></td>
<td>101</td>
<td>na</td>
<td>130 (1)</td>
</tr>
<tr>
<td>POWYS</td>
<td>19</td>
<td></td>
<td>89</td>
<td>na</td>
<td>93</td>
</tr>
<tr>
<td>W. GLAMORGAN</td>
<td>83</td>
<td></td>
<td>111</td>
<td>na</td>
<td>114 (1)</td>
</tr>
<tr>
<td>DUMFRIES &amp; GALLOWAY</td>
<td>50</td>
<td></td>
<td>107</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>N.E. FIFE</td>
<td>55</td>
<td></td>
<td>110</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>HIGHLAND</td>
<td>70</td>
<td></td>
<td>96</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>LOTHIAN (Penicuik and Dalkeith)</td>
<td>111</td>
<td></td>
<td>114</td>
<td>na</td>
<td>122</td>
</tr>
<tr>
<td>STRATHCLYDE</td>
<td>106</td>
<td></td>
<td>113</td>
<td>113</td>
<td>119</td>
</tr>
<tr>
<td>GTR. MANCHESTER</td>
<td>67</td>
<td></td>
<td>81</td>
<td>108</td>
<td>130</td>
</tr>
<tr>
<td>MERSEYSIDE</td>
<td>80</td>
<td></td>
<td>100</td>
<td>101</td>
<td>100</td>
</tr>
<tr>
<td>S. YORKSHIRE (2)</td>
<td>64 (3)</td>
<td></td>
<td>84</td>
<td>99</td>
<td>92</td>
</tr>
<tr>
<td>TYNE &amp; WEAR</td>
<td>70</td>
<td></td>
<td>97</td>
<td>99</td>
<td>104</td>
</tr>
<tr>
<td>W. MIDLANDS</td>
<td>81</td>
<td></td>
<td>97</td>
<td>98</td>
<td>101</td>
</tr>
<tr>
<td>W. YORKSHIRE</td>
<td>71</td>
<td></td>
<td>102</td>
<td>103</td>
<td>106</td>
</tr>
</tbody>
</table>

(1) New minibus services since November 1986
(2) Although S Yorkshire is not a TRRL study area it is included for completeness
(3) Spring '86

staff to too low a level, while Crosville encountered severe industrial relations difficulties over proposed changes in conditions of work arising from new patterns of services.

In the months following deregulation there were significant increases in the vehicle mileage operated in some of the study areas—especially the metropolitan areas where much of the mileage lost after deregulation was restored. This is the net result of a number of changes; authorities augmenting subsidised services to fill gaps left after the first round of tendering; operators perceiving new opportunities for commercial services, often in competition with others (eg the introduction of minibus services by United Transport Buses in Greater Manchester); operators cancelling unprofitable services (both subsidised and unsubsidised) or making other adjustments; and authorities reacting to such changes where appropriate. At present the public in most study areas is provided with better aggregate levels of service than before deregulation, and most of the initial difficulties have been overcome. The Medway towns are to some extent, a counter-example. Here, total mileage declined after November 1986 partly as a result of pruning unprofitable parts of the service. Nevertheless, overall service levels in November 1987 were still 17 per cent higher than before deregulation, and in the following month rose to 26 per cent higher, as a result of the introduction of more minibus services.

3.2 FARES

3.2.1 Fare Changes in the non-metropolitan study areas

Generally, deregulation has led to very little alteration in fare levels in the study areas, although its effects are noticeable on those routes where there is competition between operators.

In Lancashire, Wiltshire, Powys/Clwyd, Fife and Highland study areas changes in fare levels following deregulation have been unremarkable. On the majority of non-competitive routes fares have risen approximately in line with inflation. In Fife the fare levels on both Fife Scottish and Strathtay Scottish have remained at 1982 levels in accordance with previous policies. Maidstone and District (Medway) and Nottingham City Transport fares rose by about two and five per cent respectively more than...
inflation. These increases are probably attributable to increases in costs, such as the purchase of minibuses in the former case and wage awards in the latter.

In West Glamorgan the fare increases on some previously subsidised routes have been quite large (approximately 20 per cent) while fare levels in urban areas have remained unchanged or reduced.

Competition has resulted in the reduction of fares on a high percentage of routes where competition has occurred in the English and Welsh study areas. Generally within Scotland, however, operators appear to have responded to competition by increasing their range of ticket types, rather than simply by cutting single fares, in an attempt to encourage brand loyalty.

Restructuring of the bus networks of Medway and West Glamorgan following deregulation resulted in a need for interchange on a number of routes that had previously been served by through services. As a result many passengers now have to pay more for their journeys. In contrast in Nottingham, where a number of routes previously run by Trent have been replaced by two separate services (a non-subsidised section run by Trent and a subsidised section run by another operator), the county council has intervened to enable through ticketing by making reciprocal arrangements with Trent.

3.2.2 Fare changes in the Metropolitan Counties

The situation in the metropolitan counties is complicated by the fact that deregulation took place at the same time as the implementation of government policies to control charges on ratepayers made by Passenger Transport Authorities. In order to keep their expenditure within the limits imposed, several PTEs were obliged to raise fares. Around April 1986, fares rose in Greater Manchester and Merseyside by 15 per cent, in Tyne and Wear by 20 per cent and in South Yorkshire by 250 per cent. Whilst these figures are large, it is noticeable that fares in the PTE areas, particularly South Yorkshire, had previously been lower than elsewhere (average revenue per journey being 21.7p in PTE areas and 32.5p in other areas) and in most cases these were the first increases for several years. Further increases have taken place since deregulation in Greater Manchester, Tyne and Wear and Merseyside. The Merseyside increase, which applied to commercial services run by the major operators, took the form of a change from flat fares to graduated scales, and averaged 55 per cent. West Yorkshire by contrast, has had no fare increases over this period, apart from a small increase in the off-peak fare by one company.

3.2.3 Pre-paid tickets

Many of the larger operators (including most PTEs) market a range of pre-paid tickets. The details of these tickets vary a great deal, but in general they can be classified as two types: travel cards and multi-ride tickets. The former involves pre-purchase of unlimited travel throughout a specified period for a specified area. They may apply to specific operator, or, as is more usual in the PTEs, may be used on any bus, and where appropriate by rail, Metro or ferry as well. Multi-ride tickets are cancelled as they are used, offering a discount on single fares (eg 12 for the price of 10) and are of use to occasional travellers or those travelling short distances.

Most schemes remained largely unchanged by deregulation. In Strathclyde, however, a greater range of Strathclyde PTE Transcards were introduced in a number of zonal variations. Generally the price of pre-paid tickets was increased in line with other fares (see section 3.2.2) although in Merseyside the increase was substantially larger (40 per cent), and in West Yorkshire a price reduction introduced in 1985 was discontinued.

Operators’ responses to deregulation have been varied. In Tyne and Wear, Greater Manchester and Strathclyde, the former PTE companies have introduced their own travel cards, generally at a lower price than the equivalent PTE card, but allowing travel on only their own buses. This has caused confusion among passengers, who find they cannot use their cards to complete an interchange journey, or an evening journey which is a subsidised service provided by a different operator.

Similarly, in South Yorkshire, only the former PTE company accepts the PTE Savercard. This is likely to have affected a large number of passengers as a quarter of former card holders use buses of more than one operator.

In Strathclyde, the Scottish Bus Group companies have also introduced their own tickets in many local versions, which with the Strathclyde Buses tickets and the PTE tickets gives a bewildering array of possibilities for the passenger.

In Tyne and Wear, the former PTE company Busways has now stopped accepting local versions of the PTE travelcard. In addition the Transfare ticket which allowed through journeys by more than one bus or by bus and metro, a cornerstone of the integrated transport system in the area, is now only accepted on subsidised services and on a few journeys by metro to central Newcastle where the operator concerned does not provide alternative services.

Similar problems of non-interchangeability of pre-paid tickets have been experienced in three of the non-metropolitan study areas. In Lancashire the countywide Red Rose Rambler scheme was abandoned following the withdrawal from participation of Ribble which had decreased inter-service ticket transferability. In Nottinghamshire the county council
have been moderately successful in encouraging inter-availability of tickets although not all arrangements involve compensation to those operators who accept other companies’ return tickets. The council made it a condition of its contracts that operators of subsidised services should accept return tickets issued by other operators. However, operators are under no such obligation on non-subsidised services and generally refuse to accept such tickets. Nottingham City Transport’s ‘Easy Rider’ travel cards are accepted on South Notts Bus Company and county-subsidised services. South Notts Bus Company entered into a compensation agreement with Nottingham City Transport prior to deregulation. The other operators, however, receive no compensation and accept tickets in order to maintain customer goodwill.

The situation in Medway is similar. Some operators will not accept pre-paid tickets issued by other operators although those operating subsidised services are obliged by their contracts to do so.

### 3.3 EVALUATION OF CHANGE

Work on systematic evaluation of changes in services and fares in study areas is still in progress, and its results are not yet available. However, in the non-metropolitan areas the majority of people seem unaffected by changes, while the benefits and disbenefits to the minority seem fairly evenly balanced, but still subject to further change.

Some insight into the early effects of deregulation in the metropolitan areas and Strathclyde may be gained from passenger surveys conducted there for TRRL in February and March 1987 (except in Greater Manchester, where the PTE commissioned a Harris Survey). The results (Simpson and Walmsley, 1987), which should be interpreted subject to the comments in section 2.3, show that nearly half of the respondents thought their bus services were generally good, while less than a quarter thought they were bad (see figure 4). Bus users in South Yorkshire had the highest opinion of their services, with over half the respondents saying their services were ‘good’ or ‘very good’ while Merseyside was the only area with more (half as many again) replying ‘bad’ than ‘good’. The Harris survey (the results of which are summarised by Simpson and Walmsley, 1987) shows that Manchester bus users had a similarly low opinion to those in Merseyside.

Responses to the question ‘What do you think of the services since the changes?’ shows that, while 40 per cent of bus users think the services are about the same or have not noticed changes, 46 per cent think their services are worse or much worse, and 16 per cent think they are better or much better (see figure 5). The lowest opinion of the changes is in Merseyside, where 70 per cent think the services are worse, and the Harris survey shows a similar result in Greater Manchester. Strathclyde has the highest positive response, with a quarter thinking the services better but a similar number thinking them worse. Those in Strathclyde who think the services are better are presumably responding to the increased frequencies and services in Glasgow, but there are other areas of Strathclyde region—including some in Glasgow itself—where frequency reductions have occurred.

As regards bus use since the autumn changes, nearly three-quarters of bus users fall in the neutral category comprising those who use the buses the same amount and those who did not notice or were not affected by the changes (see figure 6). A small
proportion (five per cent) use the buses more, and over a fifth use them less. The largest increase and smallest decrease are in Strathclyde, and the largest decrease in Merseyside. Perhaps surprisingly in view of the comments noted above, the Harris survey indicates changes in bus use in Greater Manchester which are close to the average for other PTEs.

Figure 7 shows opinions of individual aspects of the services. Those of most concern (highest negative responses) are service frequencies (especially evenings and Sundays), fares and reliability. The most positive indication is for choice of destination. Results for individual PTEs show considerable differences. In South Yorkshire and Merseyside fares are of greatest concern, while reliability is a concern in all areas except Strathclyde. The use of discount tickets is thought to have got worse in Tyne and Wear and better in Strathclyde.

3.4 PATRONAGE

These judgements are to some extent supported by the limited evidence presently available on bus patronage in the study areas. A series of bus passenger counts is still to be completed for the non-metropolitan areas. Preliminary results for Medway and Nottingham reveal no significant change in overall demand for buses between mid-1986 and mid-1987; this finding is consistent with the view that changes in services there are on a very minor scale.

Preliminary results of passenger counts in the Scottish study areas suggest that, despite an overall increase in service levels, passenger carryings have
not improved and may be slightly down on pre-
deregulation totals. Information provided by most
major operators indicates little change in the previous
gradual downward trend. No patronage data are yet
available for the independent operators, but the
growth in vehicle mileage in this sector has been
strong, and may have resulted in sufficient growth in
patronage to offset any decline in the public sector.

The national statistics (see section 2.4) suggest a
considerable decline following deregulation in
metropolitan areas, where services were most
adversely affected and fare increases were greatest.
This finding is consistent with the following
information from individual metropolitan areas.

In West Yorkshire there is little information available
about patronage change, but the indications are that
overall patronage has decreased by about two per
cent since deregulation. This contrasts with a steady
increase of one per cent per annum over the five
years leading up to deregulation. It is thought that
the NBC patronage has maintained this increase and
that Yorkshire Rider, probably because of the
upheaval in Leeds, has suffered a decrease.

In Tyne and Wear little information is available but
patronage on the bus services was estimated to have
dropped by about ten per cent. Patronage on British Rail
services had increased at the time of deregulation and the
higher level had been maintained, though this could
not definitely be ascribed to the changes in bus
services.

In the TRRL survey of passenger attitudes, 37 per
cent of respondents in Merseyside stated that they
had used buses less since deregulation. PTE figures
suggest an overall drop of 29 per cent in passenger
journeys. Of course, much of this decline will be as a
result of the 55 per cent fares increase which was
introduced at the same time as deregulation. Rail
patronage, however, has increased by 10 per cent, despite an increase of 40 per cent in fares into
Liverpool city centre.

Patronage in Strathclyde appears to have been
maintained since deregulation. Initial indications are
that the number of people travelling to central
Glasgow has increased slightly on the main corridors,
though not as much as might have been expected in
view of the increase in levels of service.

Patronage in Greater Manchester is reported to have
dropped by approximately 10 per cent immediately
after 26 October when between six and fifteen per
cent of route mileage was lost. Rail patronage has
increased by about 10 per cent. More recent figures
for Greater Manchester are not available but it is to
be expected that patronage will have tended to
increase as services have been reinstated, especially
in view of the large amount of new minibus mileage
which is not operating.

3.5 SUBSIDY

At this stage it is possible to give only partial
accounts of changes in bus service subsidy payable
in some of the study areas following deregulation.
There are several reasons for this. Several of the
study areas are only parts of the local authority
areas, and allocation of part of the local authorities
total subsidies to them is arbitrary and of doubtful
validity (especially when applied to 'network
subsidies' paid to major operators before
deregulation). Amounts paid for the financial year
1986–1987 even when accurately known cannot be
sensibly compared with the previous year, as they
are hybrid figures consisting of payments made
under both old and new systems. On the other hand,
figures for 1987–1988 can only be estimates at this
stage, as the year still has five months to run and
there is still time for significant change. Uncertainty
is especially great where authorities have let some or
all of their contracts on a 'fixed cost' or 'revenue
guarantee' basis (eg Lancashire, Medway,
Nottingham and Wiltshire): here subsidy can only be
determined when the year's passenger revenue is
known. Finally, subsidy to local bus services is not
the only item of local authority expenditure to
undergo change. This is a particularly important

| TABLE 3 |
| Subsidies in Study Areas |

<table>
<thead>
<tr>
<th></th>
<th>Direct bus subsidies</th>
<th>Concessionary fare contributions</th>
</tr>
</thead>
<tbody>
<tr>
<td>LANCASHIRE</td>
<td>7.1</td>
<td>4.5</td>
</tr>
<tr>
<td>KENT</td>
<td>3.4</td>
<td>3.64</td>
</tr>
<tr>
<td>NOTTINGHAM</td>
<td>0.33</td>
<td>na</td>
</tr>
<tr>
<td>WILTSHIRE</td>
<td>0.64</td>
<td>0.55</td>
</tr>
<tr>
<td>CLWYD</td>
<td>1.536</td>
<td>na</td>
</tr>
<tr>
<td>POWYS</td>
<td>0.33</td>
<td>0.33</td>
</tr>
<tr>
<td>WEST GLAMORGAN</td>
<td>1.7</td>
<td>1.0</td>
</tr>
</tbody>
</table>

14
consideration where the costs associated with conversion of PTE operators to Public Transport Companies have to be taken into account, but in most areas there have also been implications for education transport budgets, concessionary fare schemes etc.

Accordingly, the part of table 3 relating to finance is incomplete, some figures apply to the whole expenditure for the particular local authority rather than the study area, and most are provisional estimates. There is considerable variation in the changes in the English and Welsh counties. While there appear to be big subsidy savings in Lancashire and West Glamorgan, there is no saving in Powys, a relatively small one in Wiltshire and a slight cost increase in Kent. No figure for 1987-1988 is yet available for Nottingham, but it is interesting to note that as a result of recent re-tendering (many contracts expired after one year) there have been changes among operators of subsidised services, resulting in reduced subsidy in the study area (City of Nottingham and the southern part of the county), but revenue support in the county as a whole has increased. Here, however, the local authorities (county and districts) are expected to make substantial savings on concessionary fare reimbursements, and some savings on costs of education transport.

The transitional rural bus grant, payable directly by central government to operators, represented a significant addition to county council subsidies in the more rural areas. In Powys, for example, the estimated total grant of £700 000 in 1977-78 was just over 20 per cent of county council subsidy, while in Wiltshire a somewhat larger sum (almost £0.1M) was rather less than 20 per cent. In Lancashire however the estimated £0.6M grant was only 13 per cent of the county council subsidy.

No figures are shown in table 3 for subsidies paid by PTEs because, for reasons given in section 2.5.4, it would be misleading to present their finances in this simple form. Analysis of the full financial implications for the PTEs is still in progress; results will be published in due course.

4 OPERATORS AND COMPETITION

4.1 NEW OPERATORS

One of the purposes of the Transport Act 1985 was to encourage new operators to enter the bus industry. In 1985-86 there were 118 bus operators in the public sector (Department of Transport et al, 1987), whose main business was the provision of local bus services, and who operated 92 per cent of total local service vehicle miles. The private sector consisted of some 5600 operators, of whom the majority were very small firms, with local bus services accounting for only 15 per cent of their mileage. There was thus considerable potential for private operators to enter the local bus market for the first time, or to increase their involvement in it.

The public sector of the industry was directly affected by provisions of the 1985 Act other than those relating to quantity control and subsidy. Local authority bus operators were reformed as companies separate from, but owned by, the local authorities; nearly all have so far remained within the public sector. Both the National Bus Company and the Scottish Bus Group reorganised themselves, creating greater numbers of smaller subsidiaries. Most of the NBC subsidiaries have now been transferred to the private sector, and the remainder are expected to be transferred early in 1988 (National Bus Company, 1987). The majority of what was the public sector of the industry is therefore composed of operators who are, technically, new, but the increase in the number of such operators is not, in itself, of much significance. The changes have however created incentives and opportunities for such operators to compete with each other, and the early consequences are discussed later in this section.

Analysis of changes in the private sector is difficult for different reasons: its size and dispersion complicate the task of compiling comprehensive statistics, and the problem is compounded by changes in definitions of services embodied in the 1985 Act. For example, there is now registration of some services not previously licensed: contract hire (often works) services under schedule 1 of the Public Passenger Vehicle Act 1981, which may now be easily registered and thus escape some of the restrictions of the 1981 Act; and school bus services, which qualify for fuel duty grant if registered and made available to the general public. It is arguable that changes of this kind have in fact generated new local services, but it appears that not all operators have classified such newly registered services (or registrable excursions and tours) as 'local' in their statistical returns to the Department of Transport. Some operators may have discontinued (or not even commenced) services they registered without cancelling their registrations. For these reasons, and possibly others, there is a discrepancy of some 400 operators between the number involved in local services estimated from statistical returns, and that derived from the registrations themselves (but the total number of vehicle miles involved is only about six million per annum). Both methods of estimation are necessary to make comparisons of numbers of operators immediately before and after deregulation, and to establish the subsequent growth; the discrepancy between the two estimates limits the scope of such comparisons.

The statistical returns reveal that of some 1020 private operators who ran local services between April and October 1986, about 30 ceased this
**Fig. 8 Vehicle miles registered**

**Fig. 9 Commercial and subsidised services, November 1986**
activity, and the rest ran local services to be operated after deregulation. They were joined by about 380 private operators who had not previously run local services. The immediate effect of deregulation was thus to increase the number of private operators running local services by about 350.

Examination of registrations between April and November 1987 reveals that a further 110 existing private operators commenced local services, as did some 50 new operators. About 125 operators gave up local services, in some cases ceasing to trade. There was thus a net increase of 35 private operators of local services over this period, at the end of which the total number, was some 1740. While, in the circumstances, it is not meaningful to quote an overall percentage increase, the net increase in the actual number of private operators of local services (excluding former NBC subsidiaries) is estimated at about 400.

4.2 MARKET SHARES

The increase in the number of vehicle miles operated since deregulation has not been uniformly distributed between different types of operator, as figure 8 shows. There has been a slight decrease in mileage operated by former PTE companies, Scottish Bus Group mileage has not changed significantly, and the other types of operator have increased their mileage. The largest absolute increases are by private companies (excluding former NBC subsidiaries) and NBC (or former NBC subsidiaries). Much NBC growth is due to the replacement of conventional services by higher frequency minibus services. By November 1987 independent private operators had achieved the highest proportionate growth (about 70 per cent), and collectively ran more vehicle miles than municipal operators or the Scottish bus Group (or London Buses Limited). Their share of the total number of vehicle miles outside London has increased from about ten to fifteen per cent. This growth is due in part to their success in winning contracts for subsidised services which account for a greater proportion of their total mileage than for any other group of operators (figure 9).

4.3 COMPETITIVE STRATEGY

The Transport Act 1985 has required operators to plan services having due regard for actual and potential competition, for passengers and for subsidised services. These considerations were crucial for operators who were deciding early in 1986 which services to run commercially, and, later in the year, which subsidised services to compete for and what prices to tender. Then, when the new services started they had to decide how to respond to competition 'on the road'. Any comprehensive exploration of operators' behaviour under these conditions would require the collection and analysis of much more information than has been possible at this stage. Nevertheless, it is of interest to discuss what is known to have occurred and, where appropriate, compare it with predictions based on traditional models of economic theory.

4.3.1 Initial registration of services

It was expected that when given an opportunity to register commercial routes, operators would examine the costs and revenues of each existing service, and register those which appeared profitable. Cross subsidy between and within services would be much reduced as operators would register just the profitable sections. Of course, when it came to services run by new operators or the possibility of existing operators running new services, the process was much more speculative as there would be no information on the revenue which might be available. However, this was thought to be no different to the decisions facing other businesses, and to offer new opportunities for innovation.

There was seen to be a wide variation in the types of strategy adopted by operators. The course of action decided upon depended on the actions (or expected actions) of the local authority and of other operators and on the approach to costing. The local authority intentions in reacting to the commercial network were a very important factor in explaining the behaviour of operators.

In many cases, particularly in non-metropolitan areas, local authority plans for tendering were well advanced. A number of local authorities had good information on route costs and revenues, budgets for tendering were known and policy statements published. Operators had a reasonable expectation that these local authorities would replace virtually all the services not registered commercially. Where this situation occurred the transition to deregulation was very ordered. The main operators knew quite accurately what tenders would be invited and what they might expect to receive in total from the individual route subsidies. This meant that operators could base their costs on the expectation that they would win tenders to reinstate the existing services. Schedules did not need complete revision and available information on costs and revenues was adequate to make the decisions on which services to register.

In contrast to this situation, there were other areas where the operators were uncertain as to the intentions of the local authorities. This was particularly so for the metropolitan areas. New Passenger Transport Authorities were desperately trying to grapple with major policy issues in order to produce policy statements. In some areas there was considerable uncertainty about the total amount of bus service subsidy which might be available. This created an entirely different situation, where major operators had to make decisions about what to register as commercial without knowing how the local authority would react. This situation was made
even more difficult within the PTE areas as the bus companies created from the PTEs often had staff who lacked experience of running bus services. It was fairly clear that these operators would have to make cuts in services as precept control took effect. There were three options available to operators in this situation. They could cost each route individually and then register just those services or parts of services which were profitable, hoping to win back some of the routes through the tendering process. They could attempt to run virtually all the existing network, while trying to make overall cost savings elsewhere. Finally, they could assess the size of the cuts required, reduce the required staff and vehicle fleet and redesign the whole route network with new assumptions about service levels and duration of the working day (e.g., two-shift rather than three-shift operation). Each of these strategies has been employed with greater or lesser success.

There was an inherent risk with the first strategy. The operator might not win back services through the tendering process, either because the local authority decided not to subsidise the services, another operator registered them, or another operator won the contract, and further cuts in vehicles and staff would need to be made. Consequently, this strategy was employed where there was the highest level of confidence in the local authority (and other operators).

The second method was to make as few changes as possible, but to achieve cost savings elsewhere. This usually resulted in tighter schedules being designed and savings through changes in working practices being assumed to allow a more efficient operation. This strategy often led to unacceptably poor service reliability, which operators tried to rectify by restoring original schedules (or something approaching them) and making cuts elsewhere. Where savings were made by reducing frequencies, local authorities often found the restoration of service levels through tendering too complex to be practicable.

The third approach was to redesign the complete network, perhaps changing the working practices at the same time. One example was to change from a three-shift day to a two-shift day. The problem with this strategy was that the network had to be redefined. It meant that while the operator probably had a viable network with the right resources, it could make little allowance for subsidised services. Local authorities faced with registration documents defining a completely new network found it almost impossible to understand the network, assess its social impact and to identify gaps which could be filled in a cost-effective way. One extreme case of this was in Leeds where the resulting network attracted a great deal of criticism. This problem has been gradually put right over time through discussion between the PTE and the operator and resulting changes which combine the commercial and tendered services in a more satisfactory fashion.

The next major factor involved in the operators’ decisions as to what to register as commercial was the expected actions of other operators. Again, there has been a wide variation in strategy, which can be explained by the interaction between operators. In some cases, it is evident that the major operators in an area were aware of each other’s registration strategies. In these cases, commercial registrations reflected the past patterns of services and there was no encroachment on the territory of the other major operators. Small independent operators were generally not included in such arrangements. The process extended to the tendering process where, to quote an extreme, in one area there was only one bid from a major operator for every contract put out to tender.

The situation where operators have continued the spirit of cooperation which has been encouraged by previous legislation can be contrasted with the situation in Strathclyde, where there has been a history of competition. Each bus company registered routes which were designed to be profitable, without regard to any historical territorial patterns. In effect, the situation there is of several large companies directly competing for the same market and the resulting situation is much nearer to that forecast using economic theory.

4.3.2 Competition for subsidised services

The other major factor involved in operators’ decisions regarding registration is the estimation of costs. Conventional economic theory suggests that operators should consider routes to be profitable if revenue exceeds the cost of a route based on average cost by the normal rate of return. Examination of the patterns of registration and of the tender prices shows that, at least in the initial period, there were wide variations in the strategies used by operators. Where the situations were stable and there was good information, services tended to be unchanged and therefore existing cost information was adequate. Where operators were forced to make decisions without full knowledge, the question of costing strategy complicated the situation. The extent to which operators had committed all their resources in commercial services often dictated whether they submitted tenders and at what prices. An operator with staff and vehicles not otherwise used tended to bid very competitively. Others who would need to obtain extra vehicles or pay overtime premiums for the work were much less interested. The variation in interest is best illustrated by observation of the tender prices. In many areas, prices were surprisingly low, and this has been attributed to operators costing on a marginal basis for those additional parts of the service not registered commercially, but which they expected to run. Yet there were cases where operators were confident that there would be no competition and where the bids were unacceptably high. In the case of schools contracts in one area, the bids varied from 80p to
£350 per pupil per week. The former was presumably for a virtually zero marginally costed journey. The latter was the cost of an operator buying a vehicle for that contract and using it exclusively for the school work. The likelihood of other operators bidding for routes and the availability of spare vehicles and staff were more influential than the average cost in the early days. One major operator had assessed the requirements for staff and had to issue formal redundancy notices before receiving the local authority list of tenders and had one week to respond. In these circumstances, it was almost impossible to produce proper costings.

4.3.3 Reactions to competition

There are now several examples of intense competition between major operators where newcomers (in some cases new operators) have ‘invaded’ established operators‘territories’. In such cases the reaction from the incumbent operator has been marked. There is evidence of a rapid reassessment of the part of the network under attack, and the redeployment of resources to reduce the impact (or threatened impact) of the newcomer. Powerful competitors can create a considerable effect because of their mobility: they are not constrained by motives of self-preservation or social responsibility to attempt to conserve previous networks of services.

The reaction of the large operators to small independent operators is mixed. While there are cases where new operators are not inhibited in any way by the larger operator, the more usual reaction is for the larger operator to compete very hard with the newcomer, deploying rather more resources than the situation would appear to warrant. Current evidence would suggest that many new operators are sustaining this competition, but that some have succumbed to it.

There has been speculation about how operators are managing to pay for the losses which they seem to be incurring as a result of intense competition, in spite of measures designed to make more productive use of labour. The choice must be between cross-subsidy from other routes (or operators?) and use of reserves. There is no available evidence to date on

Fig. 10 Bus competition
Autumn 1986

Fig. 11 Bus competition
Summer 1987
which is being employed. Commentators on the situation in Glasgow agree that the competition cannot be maintained at the current levels indefinitely, but it has endured for almost one year now.

4.4 GROWTH OF COMPETITION
Between October 1986 and January 1987 there was only a modest number of examples of competition by rival operators on common routes. Figure 10 shows the locations of those cases that were reported to TRRL in the autumn of 1986: they are quite thinly scattered over the country, except for a concentration in Scotland. Figure 11 shows the corresponding situation about six months later, by which time there were many more examples, of which the most notable were, perhaps, the introduction of major minibus services in Greater Manchester and Preston by United Transport Buses, and in Oxford by Thames Transit. At the other end of the scale there are examples of competitors running occasional buses along routes where there are already frequent services. Although some operators have now withdrawn services in the face of competition, and it seems unlikely that some others will be able to maintain their competitive services indefinitely, it seems probable that competition will continue to increase, at least over the next year or so.

4.5 CASE STUDIES OF COMPETITION
TRRL is conducting a number of case studies in order to obtain a better understanding of the development of competition, and its impact on local services and passengers. Preliminary analysis of data on bus passenger numbers on seven routes shows that patronage has increased on four of them, and decreased on one; the results for the other two are inconclusive.

More detailed results are available from a survey of bus passengers in Easterhouse, a post-war council housing estate on the fringe of Glasgow where competition between three operators has dramatically increased bus service levels. Half the passengers interviewed said that they had been affected by the changes, mainly through a greater choice of buses and destinations. Although service levels were very high—over 40 buses per hour in the morning peak, and over 50 per hour between peaks—relatively small proportions of passengers were selective. A fifth used only one operator’s services, and a quarter used more but were selective in some circumstances. The reasons given for being selective were generally related to frequency, timing and convenience rather than quality of services. About a third of passengers caught whichever bus came first.

5 INNOVATION
5.1 MINIBUSES
The most significant innovation that can be related to deregulation is the expansion of the use of minibuses on urban services. This development was possible under the old legislation (in fact, expansion began in 1984), and other factors, such as the condition of the labour market, have been significant influences. Nevertheless, deregulation was undoubtedly the major factor that stimulated minibus growth.

The first major urban minibus scheme was introduced in Exeter in February 1984. Steady growth occurred during the following year, and this accelerated in late 1985 and through 1986. Initially NBC was the innovator, and it was estimated that by the end of 1986 some 3000 minibuses were in operation by current and former subsidiaries of NBC. Extensive growth has subsequently occurred amongst other operators too. By the end of 1987 the number of minibuses in use on local bus services was over 5000, representing of the order of 10–15 per cent of the total stock of vehicles in use on such services. The number of places served by this time was nearly 400. The places are well spread geographically, as shown in figure 12.

![Fig. 12 Minibus services Summer 1987](image-url)
Frequencies of most new minibus services have been considerably higher than those of the conventional services they replaced, typically by a ratio of 3:1, though in some places by as much as 5 or 6:1. As well as higher frequencies, there have been other improvements, notably greater penetration of residential areas, higher running speeds, and 'hail-and-ride' in residential areas. New services have also been accompanied by major marketing efforts, and a further feature has been an emphasis on improving driver-passenger relations, with new drivers selected partly on the basis of their ability to deal with people.

Passengers have generally responded to these changes with enthusiasm, and there has been considerable growth in patronage. Operators can be sensitive about divulging patronage information, but reported increases show a very wide range, from as low as about 20 per cent to well over 100 per cent (it is not always possible to compare exactly like-with-like, and some of the highest rises relate to poor and lowly patronised former arrangements). Relatively little is at present known about the nature of the increased patronage, for instance, journey purposes, the extent to which new trips are generated or diverted from what former modes, and so on. Research is in hand to gather better and more quantified information about patronage changes.

Whilst services have been popular with users, the true long-term financial position of the services is not yet clear. As with patronage information, for commercial reasons operators are now loath to divulge their costings. Nevertheless, some insight is provided by a theoretical analysis (Turner and White, 1987) which took a whole-life view, and compared the cost of a conventional operation with that of a replacement minibus service, making allowance for all the changed parameters, such as numbers and costs of vehicles, their lifespans, wage levels etc. This suggested that a typical conversion with a replacement ratio of three minibuses to one conventional bus would result in an overall cost increase of the order of 60–90 per cent. This indicates the level of patronage increase that needs to be attracted, assuming fares unchanged. This in turn implies a service elasticity of the order of +0.4. This can be achieved, but not universally. Financial evaluations are complex, and can be influenced, for example, by requirements for the provision of peak capacity. No-one yet knows exactly how long-term costs will actually work out because the lifespans and long-run maintenance costs of the small vehicles now being used on intensive urban operations have yet to be demonstrated.

The wholesale adoption of minibuses by NBC in anticipation of deregulation in 1984 was a major initiative since it overturned previous industry wisdom that such operations were not viable. However, with deregulation in mind, even where passenger response might not prove sufficient to cover increased costs, an operator might decide that it was worth bearing any loss, at least in the short term, because a frequent minibus operation gives an increased presence that can be a considerable competitive advantage, and a deterrent to others. The TRRL continues to monitor developments, and intends to produce by early 1989 an updated general review and revised cost analysis, incorporating improved information emerging from the growing period of operating experience.

5.2 TAXIBUSES

The number of Taxi operators interested in providing local services has increased steadily. The latest analysis of the Bus Registration Index reveals that a total of 99 services has so far been registered with the Traffic Area Offices. However, not all of these services are in operation: in a recent survey of these operations 44 were found to be running—a further 43 had ceased (or had never started) and the current position of the last 12 remains unknown.

As may be expected this instability occurs mainly among unsubsidised services—as many operators appear to enter as are forced to quit when operating on a commercial basis. Of the 44 services known to be running, 30 are commercial and 14 are subsidised.

6 SAFETY AND MAINTENANCE

6.1 ACCIDENTS

Road accident rates are subject to considerable fluctuations, which render comparisons over short periods completely unreliable. (For this reason, a three year trial period was adopted for the evaluation of seat-belt legislation in 1983). Injury accidents involving buses are much less frequent than those involving cars, so it may be necessary to compare several years' statistics in order to establish whether there is a significant difference in accident rates before and after deregulation. Two years' national statistics may be enough to give a preliminary indication of change, or absence of change; those for November 1986 to October 1988 should be available in a form suitable for analysis by the autumn of 1989.

In smaller areas (e.g. local authority or police areas) the numbers of bus accidents may be so small that any true variation is swamped by fluctuations. It is thus probable that there will be substantial increases in the numbers of bus accidents in some places, generating adverse public reaction, and substantial decreases in other places, which will not be reported.

6.2 MAINTENANCE STANDARDS

The Vehicle Inspectorate is making a series of random spot checks on buses, in order to establish whether there is any systematic trend in the
condition of vehicles actually in use on local bus services. So far, three such surveys have been made, each involving 3100 vehicles (ie about 5 per cent of the total) chosen at random throughout the country. These surveys took place in July 1986 (just before deregulation), April 1987 and September/October 1987.

There appear to be a number of detailed differences between the results of the first two surveys, and it is yet to be determined whether these represent real changes or are a product of the survey methodology; comparison with the results of the third survey should cast some light on these problems. At present it is not possible to conclude, with an acceptable degree of confidence, whether or not there has been any change in the condition of vehicles.

It is, however, interesting to note that in the first two surveys the failure rates for vehicles owned by private operators (excluding former NBC subsidiaries) were considerably lower than the average for all operators.

7 PROSPECTS FOR THE FUTURE

The developments which have been observed over the last year are the result of experimental and tentative responses to a major perturbation in the bus industry and the conditions under which it operates. There is no reason to suppose that all the transient effects have yet died out and that a state of equilibrium has been reached: the rate of change of registrations is currently about 160 per cent per annum. The number of vehicle miles operated is well above the pre-deregulation level, and appears to be rising; but service subsidies are lower than before, but they are also rising. It would be injudicious to attempt to extrapolate these apparent trends without proper quantitative analysis of the various underlying factors and the information required for this is not yet available.

It is becoming clear, however that many operators made decisions which, in the light of experience, turned out to be wrong. Some of these were inevitable, some could have been foreseen. Some managers have paid the cost of these mistakes by being dismissed or moved. A few new companies have gone bust. However, now that the bus industry has had a chance to operate in the new environment, matters are improving. Yet there are still many signs that the situation is far from stable. Some operators are forging ahead and are examples to others. Competition is increasing and this will inevitably weed out those operators who, for any number of reasons, find themselves unable to sustain their operation.

It is clear that operators are gradually reassessing services in a systematic fashion and that they are making changes to improve profitability. Frequencies and hence schedules are adjusted to increase efficiency. Non profitable parts of routes are withdrawn and usually local authorities replace them with subsidised services. More realistic costing seems to have increased prices in some places (substantially so where there were obvious initial errors), but competition has reduced then in others; currently available information is too patchy and contradictory to deduce a longer term trend. The phasing out of rural bus grant may also reduce the number of services which operators regard as commercial and increase the amounts of subsidy demanded for others.

Local Authorities will also gain experience of manipulating subsidised services, possibly becoming more skilled at channelling money towards services where it will produce the most benefit.

8 CONCLUSIONS

At this stage the formation of conclusions about the effects of deregulation is beset with two major difficulties: the effects have varied enormously from place to place (often at a very local level) so that there are inevitably exceptions to generalisations; and changes are still occurring at a much faster rate than before deregulation, limiting the thoroughness with which up-to-date information may be analysed and the confidence with which forecasts may be made. Nevertheless, the following conclusions give a reasonable impression of the situation one year after deregulation.

1. On deregulation there was a marginal increase in local bus services outside London: the number of vehicle miles was some four per cent higher in November 1986 than in 1985–86. One year later (November 1987) the total was estimated to be about thirteen per cent higher than in 1985–86.

2. Initially some 85 per cent of vehicle miles were operated commercially but this proportion may be decreasing.

3. Fares in general seem to have been unaffected by deregulation, except where competition has led to fare reductions. In metropolitan areas, however, there have been substantial fare increases (from relatively low fare levels) largely as a result of the imposition of expenditure limits on Passenger Transport Authorities. A number of arrangements facilitating through ticketing and the use of pre-paid tickets have been terminated, causing inconvenience and significantly increasing the fares some passengers have to pay. In most cases there has been no change or marginal improvements in concessionary fare arrangements.

4. Changes in bus services have, inevitably, benefited some passengers and adversely affected others. In metropolitan areas, there were
decreases in service levels immediately after deregulation, and in some cases there were operational problems. This resulted in marked public dissatisfaction and significant loss in patronage. Since then, however, service levels have been increased to pre-deregulation levels or better.

5. There have been substantial savings in direct bus service subsidies. These have been partially offset by increases in administrative and publicity costs to local authorities, and by the costs of establishing Public Transport Companies.

6. About 400 more private operators are now running local bus services. The independent sector of the bus industry is now running about seventy per cent more vehicle miles than before, and has successfully competed for contracts for subsidised services.

7. Competition between operators on common routes is increasing.

8. Innovation is mainly in the form of minibus services which are now being operated in nearly 400 places. They are generally popular with passengers.

9. There is as yet no discernable change in bus safety or maintenance standards.

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10 REFERENCES


