

RECENT UK EXPERIENCE OF THE INFLUENCE OF REGULATION ON PERFORMANCE

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Introduction

Experience gained from past practice is useful since it can help inform policy-makers as to future directions. However, the British bus industry is poised to pass into a completely new era in October 1986 - by the abolition of road service licensing, i.e. deregulating route and quantity control thereon - and so move into an uncertain phase in which past experience is of more limited value. The path ahead is laid down by the 1985 Transport Act, passed by Parliament in October 1985, which in addition to deregulation intends to restructure the industry. The Act follows proposals laid out the previous year in a White Paper, "Buses" (Cmnd 9300). The intention of deregulation, according to this, is to eliminate supposedly damaging cross-subsidy, and reduce revenue support, by the rigours imposed through competition on-the-road.

Before we delve into the murkier waters of what may or may not happen, it will be instructive to review recent experience and events and the circumstances which shaped them. Firstly, the outgoing regulatory system will be described, followed by an examination of the recent performance of various sectors of the British bus industry. Innovations which have recently emerged will be considered. The impact of deregulation of long distance ('express') services, and other measures, under the 1980 Transport Act will then be briefly reviewed. The implications of local government fiscal restraint upon operations will be considered in relation to the evolving legislation, followed by conclusions.

The Regulatory System

Prior to the 1985 Transport Act, British bus operation for local (formerly 'stage') services was subject to a four-fold set of regulations. Firstly, operators must have an operators licence, which is essentially a certification of financial viability and road-worthiness, if applicable, given past practices. This requirement was introduced by the 1980 Transport Act. Secondly, each driver must have a special 'public service vehicle' (PSV) driving licence, gained after suitable training and proven medical fitness. Thirdly, each vehicle has its own PSV licence, which is attached subject to passing a rigorous testing procedure. These regulatory systems remain under the 1985 Act which has made them slightly stricter, partly - one may suppose - to allay fears over operational safety in the forthcoming environment. The poor safety record in the 1920s was the principal reason for introducing regulation in the first place (1). Finally, there was road service licensing, to be abolished under the Act from October 1986 onwards, although replaced by a registration system which 'logs' the competition, but does not seek to control it through quantity or price control as the license system did.

A further significant feature affecting operations prior to the 1985 Act was what might be called the 'transport planning function' of local government. It is worth bearing in mind that local authorities discharged their planning function through operators drawn almost entirely from the

public sector; in 1984 only 3% of stage passenger trips were made on private sector vehicles (2). Nevertheless, private sector operators were drawn into planning arrangements - including support payments - with authorities across the political spectrum.

Policy decisions concerning public transport, both at the national and local level, respond to evolving circumstances. Policy need not be a passive instrument, but rather may itself prompt change. The role of public policy-making on market outcomes, especially at a local level, is crucial under a regulatory system. Deregulation of stage services is a radical policy initiative, and has its roots in recent events. Its inception in Britain reflects the growing conflict between central and local government over financial matters, and its formulation is part of a wider debate concerning 'planning' (constituting an intervention in local economies) and 'market forces'.

The planning of stage passenger transport reflected the industry structure. Each Metropolitan county, acting as a Passenger Transport Authority (PTA), owned and controlled the principal operator - the Passenger Transport Executive (PTE) - in its area. The 1968 Transport Act (Section 9(3)) charged the controlling authorities, the PTAs, with promoting "...the provision of a properly integrated and efficient system of public passenger transport to meet the needs of the area with due regard to town planning, traffic and parking policies and to economy and safety...". The 1969 Transport Act charged the Greater London Council (GLC) with similar responsibilities with what was London Transport (LT). Since the above local authorities also had responsibilities over land use planning and highways, these functions in principle could have been considered together, though often were not.

Just under fifty lower tier local authorities in Great Britain ('District' councils) also owned and controlled their own bus undertakings. Collectively, these are known as municipal operators. The final segment of the public sector operators fell under the control of central government. This took the form of the National Bus Company (NBC), comprising about fifty subsidiaries in England and Wales, and the Scottish Bus Group (SBG) north of the border which, apart from eleven road passenger subsidiaries, has interests in shipping, and ancillary services.

For stage operation, the 1984 ridership shares in terms of passenger trips of the public sector operators were: 21% for LT; 33% for the PTEs; 15% for the municipals; 25% for NBC; and 6% for SBG (2).

The 1978 Transport Act charged each non-metropolitan ('shire') county in England and Wales with the responsibility to co-ordinate public transport. Together with earlier legislation this Act also required them to produce two documents annually: the Public Transport Plan, covering issues such as network size, concessionary fares, and school transport; and the Transport Policies and Programme which deals with broader transport issues, including highways, and which makes a formal submission to central government for Transport Supplementary Grant to help fund its programme. County-wide bus services in the 'shires' are largely operated by NBC.

It is clear that local authorities which owned their own undertaking - either municipals, or PTEs - had a greater degree of control over public transport than 'shire' counties. But both had strictly limited say over central government public sector industries and services, which diminished their abilities to integrate land-use and transport planning. Following the passage of the 1985 Act, however, the political control over public transport operation which local authorities exercised over their own undertakings has been reduced considerably. Under the Act such undertakings

have been set up as 'arms length' companies, and are unable to receive global revenue support as before. In effect they have been given a commercial remit. Services which are uncommercial, though socially desirable, can be directly subsidised by local authorities at their discretion through a process of competitive tendering.

The pattern of planning responsibilities and political control prior to the 1985 Act could be seen as, *de facto*, a system of regulation by proxy. Formally, regulation was performed through the licensing powers of traffic commissioners, nominated by central government, but non-partisan, independent of both operators and local authorities. However, the level of service provision and fares was clearly subject to local political influence and control. Indeed, local elections have been partially determined through positions taken by parties on public transport. The 1985 Act effectively dispensed with these powers and the statutory responsibility to cover "transport needs". The ability to cover perceived 'social requirements' is no substitute for general policy formulation - for example concerning fare levels - nor can wider social objectives be pursued. The potential for integrating land use and transport planning has also been correspondingly diminished.

One further point: in dispensing their road service licensing powers Traffic Commissioners had a remit to consider the passengers viewpoint, for a licence would not be granted if it was "against the public interest". In abolishing road service licensing, the 1985 Act implicitly rejects passenger interests as the focus of concern, and replaces it with creating a climate of "fair competition" between operators.

Operational Diversification and Market Share

The 1980 Transport Act contained three principal measures: it 'deregulated', i.e. removed route licensing and pricing restrictions on express services (those scheduled road passenger services with pick-up/set-down distances greater than 30 miles); it enabled local authorities to designate 'trial areas', in which stage services (i.e. below 30 miles in the sense above) were completely deregulated; and, it considerably liberalised stage licensing. The first two areas will be covered later and in a paper by Robbins and White (3). The third will be clarified and dealt with here. The 1980 Act shifted the onus of proof from applicant to objector in cases where the public interest was under dispute, before granting a 'route' licence. The objector could be another operator or local authority, as well as the general public, police, or other body. In effect licences were granted virtually automatically unless some objection was made. Only one in 200 applications were initially refused, and of the few cases that went to appeal, the Secretary of State rejected half (4). This sampling frame contains many routine applications. In a sample of competitive services reviewed by Savage (5), 70% of licenses were granted. The 1980 Act thus had introduced a very liberal regime.

For licensing purposes the 1980 Act treated excursion and tour operation as stage services, if under 30 miles, although deregulated services above this limit. For the latter, very strong competition developed, with the private sector taking the greater role. There is little documentation of detailed effects. Contract work and private hire have never been quantity regulated. The liberalisation and deregulation thus introduced contributed to the diversification of many operators. This is illustrated by Table 1. The industry is organised into sectors, and arranged by density of urban operation, which increases to the left of the Table. Table 1a shows that in 1984 stage work forms a larger share of service mileage as the area of operation becomes more urban. LRT operates

almost exclusively stage services. Municipals by contrast have a more diverse operational base than LRT and the PTEs, notably in private hire and contract mileage. Table 1b shows the extent to which this market diversification has taken place since the 1980 Act.

Table 1 The British Bus Industry - Diversity of operation by sector using vehicle mileage as an indicator, %

Table 1a Composition of mileage run within each sector, 1984 (Percentages)

	LT/LRT	PTEs	Municipals	NBC	SBG	Private	Total
Stage	99.6	97.7	94.9	84.3	83.6	14.4	64.1
Express		.2	.4	9.2	10.0	2.6	4.3
Excursions/Tours			.4	1.1	1.0	10.0	3.9
Contract		1.1	1.7	2.0	3.4	34.9	13.2
Private Hire	.4	1.0	2.6	3.4	2.0	38.1	14.5
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 1b Change in mileage composition, 1981 to 1984 (Percentage points)

	LT/LRT	PTEs	Municipals	NBC	SBG	Private	Total(*)
Stage	0.4	0.0	-1.3	-2.8	-1.4	-0.7	-1.6
Express		0.2	0.4	2.9	3.2	-0.5	32.7
Excursions/Tours	-0.4		0.4	-0.7	0.0	2.7	30.6
Contract		-0.4	0.0	-0.6	-2.4	-1.9	0.5
Private Hire	0.0	0.2	0.5	1.2	0.6	0.4	12.1
	0.0	0.0	0.0	0.0	0.0	0.0	2.6

(*) National change in total mileage
Source: Transport Statistics, GB

NBC and SBG have more diverse bases still, with sizeable proportions of express mileage. For both their express and private hire markets have grown, whilst their other markets have declined. Together private operators, about 5,700 in all, serve a wide range of markets, although individually they are liable to concentrate their activities in particular markets. Their main areas of operation are contract and private hire (Table 1a), although recently the excursion/tour and private hire markets have been the only areas of increasing market share, despite the marked absolute growth in express mileage.

Altogether, stage mileage has declined in absolute terms (Table 1b), whilst all other markets have grown, particularly the express and excursion/tours. The stimulation of express is a direct consequence of its deregulation.

Table 2 gives the market shares of the various sectors. The private sector accounts for only 34% of total mileage, though operating most of the excursions, contract, and private hire mileage. The largest element currently within the public sector is NBC, but this is to be privatised under the 1985 Act. NBC operates the lion's share of express mileage, and almost 40% of stage. Table 2b shows that under deregulation, the public sector, particularly NBC, has increased its share of the express market.

Table 2 The British Bus Industry - Market share by sector measured by vehicle mileage

Table 2a Share of Market by type, 1984 (Percentage)

	LT/LRT	PTEs	Municipals	NBC	SBG	Private	Total
Stage	12.6	22.4	10.5	38.9	7.9	7.7	100.0
Express		.7	.7	63.4	14.1	21.1	100.0
Excursions/Tours			.8	8.6	1.6	89.1	100.0
Contract		1.2	1.0	4.6	1.6	91.6	100.0
Private Hire	0.2	1.0	1.2	6.7	.8	90.1	100.0
TOTAL	8.1	14.7	7.1	29.6	6.1	34.4	100.0

Table 2b Change in Market share 1981 - 1984, (Percentage points)

	LT/LRT	PTEs	Municipals	NBC	SBG	Private	Total
Stage	-0.4	0.4	0.1	-0.3	-0.2	0.4	0.0
Express		0.7	0.7	6.4	1.0	-8.8	0.0
Excursions/Tours	-1.0		0.8	-9.8	-0.4	10.4	0.0
Contract		-0.4	0.1	-1.2	-1.2	2.7	0.0
Private Hire	0.0	0.1	0.0	1.6	0.1	-1.8	0.0
TOTAL	-0.6	-0.2	-0.1	-0.5	-0.3	1.9	0.0

Source: Transport Statistics, GB

The municipals have increased their shares in all markets. Otherwise, the public sector operators have made mixtures of gains (across the board for private hire) and losses. Altogether, the public sector has lost market share to the private sector. The private sector has been particularly successful in capturing a part of the excursion market from NBC. Despite stage service liberalisation, the private sector has made only a minor incursion into this market.

The increased private sector share of the contract market, in which it has a dominant position, is a consequence of external factors rather than regulatory changes. Under the 1944 Education Act, local education authorities must provide free transport for school journeys greater than 3 miles (2 miles for those less than 8 years). Such 'statutory' provision may be made on stage services (school children are issued with passes and operators are reimbursed accordingly) or, especially in rural areas, by contract. The private sector, with its more flexible (part-time) working arrangements and localised operating bases, is in a better position to serve the latter market than the public sector, which would increase its peak/inter-peak ratio unfavourably.

Recent events affecting stage operation

Briefly, the British urban bus industry has been contracting since the 1950s, following increased car ownership. This in turn led to a movement of population away from large urban centres which were focii of employment, especially in manufacturing. Changing industrial structure resulting in an employment profile skewed towards services (6) exacerbated these trends since service employment increased greatest in relatively smaller towns and cities, especially in the south of England. Between the census years of

1971 and 1981, the population of all the Metropolitan counties declined. The rapid growth in unemployment since 1979 has been concentrated in these areas (though not in London), the North of England, Scotland, Ireland, and parts of Wales.

As a result of these factors local bus services have contracted further, and the thinning of passengers on some routes has led to a call on public monies for revenue support to plug the increasing gap between revenues and costs. In the late 1960s cross-subsidisation was sufficient to cover loss-making routes in virtually all areas. By the 1980s almost all areas required explicit support from local authorities.

In non-Metropolitan counties support payments were primarily directed to service provision, a process encouraged by the 1978 Act. The concentration of disadvantaged groups in the conurbations resulted in a degree of support being directed at lowering fares. A more vigorous low fares policy was pursued in the Mets and the GLC, when the Labour Party took control of these councils in the May 1981 local elections.

It is the level of support given in these areas which led the Government to propose a series of measures which ultimately led to the 1985 Act and stage deregulation. This is dealt with more fully below in the section on fiscal constraint. Two points arise here.

Firstly, revenue support does not generally exceed 30% of operating costs in Britain, and is usually much below this. Elsewhere in Europe and North America support is often considerably greater: about 50% in Paris, Copenhagen and Chicago, 66% in Brussels and Stockholm, 70% in New York, and 83% in Milan (7).

Secondly, a convoluted series of events took place in London. In October 1981 the GLC decreased LT fares by about 30%, but successful litigation by a London Borough resulted in a doubling of fares in Spring 1982. However, following further legal clarification fares were cut again, by 25%, in May 1983 under the criterion of fulfilling local transport needs, as required under the 1969 Transport Act. The May 1983 fares revision was accompanied by the introduction of the highly successful travelcard and zonal fare structure. Travelcard bought unlimited journeys on the bus and underground systems (sold together for the first time) or zones thereof, for a specified period of time - a week, month, quarter year, or year. Ridership increased considerably: passenger miles increased by 17% for bus, and by 44% for underground from year end 1982 to year end 1984 (8).

The GLC indicated in its three-year plans produced under the 1983 Transport Act, that money fares were to be maintained. The Government reaction was to pass the London Regional Transport Act 1984, which transferred control of LT (redubbed 'LRT') to the Department of Transport (DTP) in June 1984 with altered responsibilities and duties. In particular LRT must have "due regard" to travel needs, but does not have to "meet" them. The Government's intention is to broadly maintain real fare levels, though decrease revenue support by half of its 1984/5 level by 1986/7 through productivity and efficiency gains.

Recent Performance under Regulation

What operational consequences have followed from the pre-1985 Act regulatory and planning system? Monitoring trends in performance and efficiency for the British bus industry in the 1970s was the subject of a previous study at PCL (9). The data base upon which this work was founded has been updated, and review articles on more recent trends have been

published (10). We shall summarise the results of recent trends here for the period after the 1980 Transport Act.

Table 3a gives basic operating statistics and performance measures in common form for the sectors of the British bus industry as arranged in Tables 1 and 2. The data relates to calendar years 1981 and 1984, and the percentage (or percentage point) changes over this period. All financial figures are in 1984 real prices.

The data for stage services indicate the effect of low fares policies. The average revenue per passenger trip (ARP) - which includes concessionary fares payments but excludes revenue support - can be taken as a proxy for the average fare. Despite the 2% ARP reduction in London the 7% increase in passenger trips is far greater than what would be expected under 'conventional' elasticity assumptions (-0.3 for fares, about +0.4 for services), given the 5% reduction in service mileage. Despite the complex sequence of events in London, this outcome can be interpreted as a result of the success of Travelcard.

The policies pursued in the PTEs have resulted in a 14% increase in passenger trips, for a 6% ARP reduction and stable service levels. Given the deleterious effects of background factors (depopulation, car ownership, unemployment) this outcome may be interpreted as reflecting the success of the series of ticketing innovations pursued in these areas, as discussed later below. By contrast, the spiral of decline characterised by increased fares and reduced mileage, has resulted in more conventional outcomes for the municipal sector.

For NBC, fares have apparently remained about constant in real terms, and passenger trips have declined pro rata with service mileage. But this pattern disguises an aspect of NBC's operation. In PTE areas, NBC has operated fares and services at PTE specified levels under agency agreements. Substantial NBC mileage is operated in PTE areas, particularly in Tyne and Wear, and South Yorkshire. In non-metropolitan counties, NBC fares are therefore likely to have increased correspondingly more in real terms. SBG followed a similar pattern to NBC.

Despite their increased mileage, private operators have experienced a decline in ridership, and this is associated with their sharp ARP increases, the largest of any sector over this period.

In absolute terms, fares per passenger trip are lowest for the denser urban operators, and are higher as one moves across Table 3a towards the more rural operators with longer trips and lower densities of demand.

Taking stage and other services together, the pattern of ridership, ARP, and service levels repeats itself for all sectors, except NBC. Overall, NBC service mileage and ARP have increased relative to its stage services, and this is a consequence of its greater penetration into the express market (Tables 1 and 2).

Staff numbers have decreased for all sectors in the public domain. In particular the very sharp drop of 13% for LRT is related to the Government's efficiency campaign when it took control of LT's service in June 1984. The staff reductions for 1985 have accelerated, due to the further conversion to one-person operation (opo). London is unusual in Britain for its retention of crew operation. Opo mileage was 53% in June 1984 and by the end of 1984/5 increased to 58%. The proportion of drivers to total staff is about 50% for all sectors.

The staff figures for the private sector are subject to bias.

THE BRITISH BUS INDUSTRY - operating statistics and performance measures

Table 3

	LT/LRT			PTE			MUNICIPALS			NBC			SBC			PRIVATE		
	1981	1984	% change	1981	1984	% change	1981	1984	% change	1981	1984	% change	1981	1984	% change	1981	1984	% change
Stage services																		
passenger trips (mill)	1080	1160	7.4	1786	1811	14.0	870	821	-5.6	1451	1353	-6.8	*304	*299	-1.6	176	171	-2.8
passenger receipts (£m)	252.3	265.3	5.2	401.7	282.7	-4.7	199.6	202.2	1.7	550.3	516.9	-6.1	*124.3	*121.5	-2.3	65.9	69.5	5.5
av revenue/pass (p)	23.4	22.9	-2.1	22.5	21.1	-6.0	22.9	24.6	7.5	37.9	38.2	0.7	*40.8	*40.6	-0.6	37.4	40.6	8.5
vehicle miles (mill)	173.9	165.8	-4.6	295.0	295.0	0.0	139.1	138.5	-0.4	500	465	-6.8	*105.0	*102.5	-2.5	98.1	101.8	3.8
All services																		
passenger trips (mill)	*1018	*1161	7.4	1805	1826	11.6	886	837	-5.5	1511	1430	-5.4	321.6	311.5	-3.1	647	659	1.9
passenger receipts (£m)	*254.6	*266.6	4.7	408.8	389.4	-4.7	206.2	209.7	1.7	670.1	677.5	1.1	142.0	137.4	-3.2	469.0	493.8	5.3
av revenue/pass (p)	23.6	22.9	-2.6	22.6	21.3	-5.8	23.4	25.1	7.7	44.3	47.4	6.8	44.2	44.1	-0.1	72.5	74.9	3.4
vehicle miles (mill)	*175.1	*166.4	-5.0	302.4	301.8	-0.2	144.7	145.9	0.9	607	612	-0.8	123.6	122.6	-0.8	650.8	709.2	9.0
total staff ('000)	31.1	27.2	-12.5	40.9	37.6	-8.3	17.9	17.0	-5.5	53.2	50.0	-5.9	9.7	9.3	-4.3	35.3	38.4	8.8
drivers as % of total	*40.7	*47.1	6.4	47.0	50.3	3.3	54.8	56.7	1.9	*51.4	*53.9	-2.5	52.1	53.8	3.3	52.8	49.1	-3.7
conductors as % of total	*22.9	*22.7	-0.2	5.5	3.6	-1.8	3.7	1.8	-1.9	*3.7	*7.1	-2.7	1.1	0.0	-1.1	1.9	1.6	-0.3
operational fleet	5610	4970	-11.4	10062	9465	-5.9	5490	5262	-4.2	14712	14083	-4.3	3415	3072	-10.0	29741	30785	3.5
bus miles/member of staff	5630	6120	8.7	7390	8040	8.8	8060	8600	6.7	11400	12200	7.2	12800	13200	3.7	18430	18460	0.2
bus miles/vehicle ('000)	31.2	33.5	7.3	30.1	31.9	6.1	26.4	27.7	5.2	41.3	43.5	5.3	36.2	39.9	10.3	21.9	23.0	5.3
staff/vehicle	5.54	5.47	-1.3	4.07	3.97	-2.5	3.27	3.22	-1.4	3.61	3.55	-1.7	2.84	3.02	6.3	3.19	1.25	5.0
passenger/staff ('000)	34.8	42.7	22.8	44.1	48.6	10.3	49.4	49.3	-0.2	28.4	28.6	0.6	33.2	33.6	1.2	18.3	17.2	-6.4
passenger/vehicle ('000)	192	234	21.2	179	193	7.5	161	159	-1.4	103	102	-1.1	94	101	7.7	22	21	-1.6
Costs																		
				1980/81	1983/84		1980/81	1983/84										
op costs/bus (£000)	74.4	84.4	13.4	54.0	57.6	6.7	40.3	40.9	1.5	47.6	50.3	5.5	43.2	42.0	-2.7			
op costs/bus mile (p)	240	253	5.3	176	179	1.8	157	148	-5.7	115	116	0.2	119	105	-11.8			
op costs/passenger (p)	38.7	36.2	-6.4	29.8	30.0	0.8	24.7	25.4	3.2	46.4	49.5	6.7	45.9	41.4	-9.7			
SRM as % of op costs (1)	22.6	26.7	4.3	29.9	30.2	0.3	23.6	23.0	-0.4	19.3	20.9	1.6	--	--	--			
% asset costs of total costs (2)	9.2	12.1	2.9	4.2	7.2	3.0	4.9	6.5	1.6	1.6	2.8	1.2	6.7	9.4	2.7			
revenue support as % of op (3) costs	24.0	-32.4	8.4	20.6	34.0	13.4	8.2	9.2	1.0	10.0	13.6	3.6	6.4	5.7	-0.7			

Sources: Transport Statistics, CB for PTEs and Municipals (except cost data), and asterisk (*) items. Otherwise operators' Annual Reports.

Notes All money figures are in 1984 Calendar year terms. Data refers to 1981 and 1984 Calendar years, except for cost data for PTEs and Municipals which is in financial years. Passenger receipts include concessionary fares, but exclude revenue support. Percentage change for variables expressed as percentages is on the basis of percentage points. "Operating costs" exclude asset costs; "total cost" is the sum of these costs.

- (1) Figures refer to maintenance only for NBC.
- (2) For NBC and SBC this element is 'depreciation' only.
- (3) Excludes Tyre and Wear for PTEs; estimate only for LRT.

According to DTp statistics (2) there are 0.6 drivers per bus! Owner-drivers are often categorised as 'other staff' rather than drivers, but this is not enough to account for the relatively low staff numbers. Much private sector work is seasonally loaded towards the summer. By calendar year end, to which the DTp statistics refer, many of the temporary summer staff would have been laid off, so producing a serious under-counting.

Fleet statistics follow a similar pattern to staff: a public sector decrease, and private sector increase. The very large private fleet contains a large proportion of smaller vehicles, mainly used for school contract work and private hire. The average public sector vehicle contains about 50% more seats than that of the private (2).

Efficiency indicators may be divided into two groups. Firstly, those based on physical output: eg. vehicle miles/member of staff, vehicle miles/vehicle. (Staff/vehicle is a further interesting performance measure.) Secondly, those based on ridership: passenger trips/member of staff, passenger trips/vehicle. Unfortunately, data on passenger miles is generally unavailable. The DTp publishes data on the seating capacity of each sector, from which seat miles could be calculated, but the high proportion of standees in peak urban operation, particularly in the conurbations, would distort use of any indicator based on this statistic.

Physical efficiency indicators show marked improvements over all sectors, especially for the large urban operators. As the proportion of stage work decreases so mileage per member of staff increases. Hence, NBC, and SBG, with their large component of express operation, obtain absolute figures twice that of London. The figures for the private sector are inflated because of the distortion on staff numbers. Service mileage per vehicle is highest for NBC and SBG, again a reflection of express work. The lower figures for the municipals than LRT and the PTEs reflect the more intense operations in conurbations, where evening and weekend services may be more readily justified and so extend the hours (and mileage) of service. The lower figures for private operators reflect the seasonal nature of private hire and excursion operation, and the highly peaked nature of contract work.

Further conversion to opo has resulted in a decrease in staff per vehicle ratios for all public sector operators except SBG. SBG has the lowest ratio in any case, and by 1981 was virtually 100% opo. Again, figures for the private sector suffer distortion.

Ridership-based efficiency measures show marked improvements for LRT and the PTEs, an indication of the effect of low fares policies and innovations in ticketing. The municipals have experienced modest declines in these measures. The private sector figures have also declined. SBG, however, also shows improvements, although for NBC passenger trips per staff has slightly improved but passenger trips per vehicle has slightly declined.

Comparison of absolute numbers across the sectors for those measures are of limited value for two reasons:

Firstly, and obviously, each sector has its own mix of operations: stage, express, etc. The average trip length for express is considerably greater than for stage. Hence if passenger miles data were applied, passenger miles/vehicle for NBC would have increased, given the expansion of express operation. Average trip lengths have also increased for stage operation (as discussed later) so the apparent declines in ridership efficiency measures for the municipals should, in fact, be increases.

Secondly, average stage trip lengths are longer in conurbations than in smaller towns (11). Hence passenger miles/vehicle are likely to be

absolutely greater for LRT and the PTEs than the municipals, as indeed are passenger miles per vehicle mile (i.e. average loadings). Passenger miles/member of staff, however, are likely to be broadly similar for these three sectors.

Costs

Table 3b indicates changes in costs for public sector operators (no comprehensive information is available about private sector costs). The data was derived from operators' reports, and unlike Table 3a is not in common form. PTE and municipal data relate to financial years, other sectors to calendar as before. Furthermore, the 1985 Transport Act has had the effect of reducing the information which operators will disclose. Consequently comparative data was only available for 18 municipal operators, although this sample is representative of the whole sector (10).

Real operating costs (excluding asset costs) were divided by vehicles, service mileage, and passenger trips for each sector in turn to obtain measures of "unit costs". Except for SBG, these costs have generally increased, apart from costs per vehicle mile for municipals, and costs per passenger for LRT (a reflection of the increased ridership).

Comparisons of absolute unit costs between sectors is of limited value not only because of the different market mixes served by each sector, but also because of their operational environments. Rural and express services - large components of NBC and SBC operations - travel at higher speeds. Hence, unit costs per mile will necessarily be lower, due to greater hourly utilisation of staff and vehicles. A study by Leeds University showed that services between market centres in rural areas often cover their costs (12).

In metropolitan areas congestion not only leads to lower speeds, but continual braking and similar vehicular stresses increases service, repairs and maintenance (SRM) costs. This is reflected in the greater SRM proportion of operating costs for the PTEs and LT than the municipals (the figures for NBC relate only to 'maintenance').

The relatively buoyant London labour market commands higher wages than elsewhere in the country. According to the 1984 New Earnings Survey, LT drivers and conductors received a 21% higher hourly rate than similar workers under national wage agreements which applied to NBC, SBC and municipal operators up until 1986. London also had a higher proportion of crew operation than elsewhere in Britain, which contributed to higher costs. The increased sale of off-vehicle tickets through Travelcards has enabled greater opo conversion, which is now being pursued by the Government.

Opo conversion will result in staff shedding. In the wider context of the presently high unemployment levels in Britain this will have the effect, taking account of lost taxes and unemployment benefit costs, of increasing public expenditure (13). Furthermore, fears have been expressed about passenger safety - particularly for women travelling in the evening - if crew operation is reduced. Possible loss of ridership through opo conversion, and the considerations above, poses fundamental questions of how 'efficiency gains' in this context could be measured.

Real operating costs can be reduced by: real wage rate reduction; the elimination of certain costlier services; and improved operating methods. The first is likely to occur as a result of competition under the 1985 Act. However, it would not reflect greater efficiency as such, but represent a transfer payment from transport workers to passengers, and/or ratepayers/taxpayers. It should be stressed that wage rises in the road passenger

industry have been in line with those in other industries (14).

The elimination of services may be part of a broader rationalisation of networks and so lead to wider community benefits, but is more likely to turn on transfer payments and thus equity issues, from affected passengers to operators (in a commercial environment); to other passengers in a cross-subsidy situation; or ratepayers if revenue support is involved. Mileage is not, however, directly related to total operating costs, given fixed cost and semi-variable cost elements. In particular, inter-peak operation may be worked on a marginal cost basis.

Once an operator obtains 100% opo, further scope for labour efficiency is more limited, especially given EEC drivers' hours regulation. The 1985 Act is likely to change working conditions, bringing efficiency gains, though these are limited by safety aspects. Fuel efficiency, though relevant, is not a major issue since it only involves about 6% of operating costs. A major cost centre, often overlooked, concerns SRM. This element increased markedly through the 1970s with the introduction of more complex first generation rear-engined vehicles. Improvements in design have recently helped contain this element - as indicated in Table 3b - and the application of diagnostic equipment could lead to a reduction in SRM as a percentage of costs.

The increase in asset costs (Table 3b) reflects the phasing-out of New Bus Grant, which was given to all operators for stage service use by Central Government. This grant corresponded to 50% of capital outlay until 1979/80, but has recently been reduced in stages; to 20% in 1982/3, 10% in 1983/4, and nil from 1985/6 onwards.

Table 3b also documents the increase in revenue support payments, which stimulated the 1985 Act. The largest increases have occurred in the conurbations - and relate to low fares policies. Of particular interest is the fact that in these areas the increase in ridership was virtually pro rata with the increase in support level taken as a percentage of operating costs. In non-metropolitan areas revenue support has been primarily directed to maintaining service levels to help meet travel need. The thinning of ridership due to the background factors discussed earlier has led to the call for support payments.

Whilst less scope might have existed for controlling costs under the regulatory system, there is a limit to this cost control, due to macro-economic effects outside the control of transport management.

In manufacturing, process innovation leads to further capital intensification of production and reduction in costs. Service sector industries are generally more labour intensive, so there is a 'productivity gap' between the secondary and tertiary sectors. Gershuny (6) has shown, using macro-economic data over a variety of sectors for European countries, that increasing price differentials between goods and services leads to the self-provision of final demand through the purchase and use of goods, rather than the consumption of final services. Gershuny shows that this shift in the 'mode of provision' of final demand can also be explained by time-budget analysis. In transport, this process of 'social innovation' would imply a shift from public transport to car and is therefore a component of processes affecting supply/demand relations. Goods/service price differentials in favour of the former would, given a predominantly goods-related expenditure bundle for inflation-indexing purposes, imply a real service price increase. In other words, whatever short term policies are pursued to control costs, the increasingly higher productivity of manufacturing will result in pressure to increase the real costs of labour-intensive services. It is refreshing to see the bus industry is awakening to this: a similar viewpoint

is put forward in NBC's 1984 annual report (page 3).

Under this scenario, transport policy objectives will tend to revolve around a commitment, or otherwise, to public transport. The Buses White Paper argues that provision of revenue support leads to management slackness at controlling costs. Whilst statistically significant correlations between the level of revenue support and costs per bus mile have been observed (15), this is no proof of causality. Such higher costs may arise because of the provision of certain high cost services for the benefit of passengers. Analytic work (16) on the PCL data bank suggests this is so, and has also shown that although cost per bus mile is statistically related to the percentage of operating costs covered by revenue support, in excess of 75% of the variation of 'unit costs' may be attributed to other factors.

Private operators may have substantially lower unit costs than public sector firms - e.g. due to lower wage rates, poorer conditions, and/or more flexible working practices. Savings of up to 20 to 30% were suggested in the "Buses" White Paper. However, comparisons drawn from existing experience suffer from the very different nature of private and public sector operations. Hire, express and excursion work has fundamentally lower costs due to higher average speeds and reduced supervision requirements.

One must also bear in mind that any specific comparisons will be affected by the efficiency of the public sector operator in question, and a very wide variety of efficiency within the public sector has been observed in earlier work (9).

Among recent specific comparisons under like-with-like conditions have been those in the Guildford/ Cranleigh bus study (17), and through full-cost tendering for services initiated by London Regional Transport (18). In both cases, savings of about 20% were estimated, but these may be larger than would be expected over the country as a whole, being cases where private operators were willing, or well placed, to take on stage operation. In the Guildford case, these differences did not arise out of wage differentials, but through the working practices and reduced non-wage benefits (mainly pensions) offered by the private operators. In the London instance comparison was with an exceptionally high cost public sector operator, and the operational bases of the entrants were outside the Inner London area. A recent study at Newcastle University (19) suggested a net difference of about 10% between private and public sector operators, after allowing for the different mixes of work they undertake at present.

At the time of writing, there is little sign of private operators being willing to take on public sector operators directly through 'on-the-road' competition under the 1985 Act, but it is probable that many may succeed in taking over existing services which are tendered for as part of the 'non-commercial' network.

Innovations under the regulatory system

Innovations are often thought, wrongly, to relate only to physical entities. In the present context, the product 'sold' to the public is a means of travelling between locations and not 'different' vehicles as such (eg a minibus, or double decker). The latter are important quality attributes in themselves, which contribute towards the 'package' sold. But unless they facilitate a style of service provision which would not otherwise run, or attract further custom, their innovatory role is correspondingly reduced.

Travel behaviour does not simply involve trips between A and B. The

journey is continued to perhaps C and D, and eventually back 'home' to A. Such 'trip-chaining' is of particular importance in conurbations, not only because of the greater non-work opportunities in cities, but also because journey-to-work times are relatively longer (11) which acts as an inducement for some to 'stay-in-town' after work for leisure activities before going home, rather than go home first and make another trip later. Since journey-to-work trips may be embedded in a multi-purpose trip like this, the 'round trip' takes on a greater significance. Hence, the provision of public transport evening services contribute towards greater passenger flexibility, enabling the wider opportunities of city life to be realised. The alternative of not providing such services (which themselves usually do not cover their costs) could lead to mode switching from public transport for journey-to-work trips, further eroding its viability.

A similar argument may be extended to 'night' buses in the very large cities, whereby if very late buses are not provided for homebound trips, outward bound trips may not be made by bus earlier in the evening. Indeed trips may not be made at all with consequences for the local economy. In London the recent expansion of night buses had released a reservoir of suppressed demand, such that presently on Friday and Saturday there is often under-provision for passengers attracted to the services for the first time.

In conurbations, a further feature of particular importance is the role played by interchange, i.e. linked trips, which may be multi-modal. In Tyne and Wear, the PTE estimates that 18% of trips in 1983/4 involved interchanges (20). The Tyne and Wear case is particularly interesting because of the development of its Metro, and the rationalisation of its bus network, many of which now act as Metro feeders. The Metro applies the latest technologies, and is very efficient. Extensive through ticketing has facilitated multi-modal integration, which has been effective at reducing unit costs by increasing loads on the Metro.

These network effects, and the issues they raise concerning the allocation of costs and revenues, challenge the simple logic behind the 1985 Act, and the supposed benefits which would flow from the elimination of cross-subsidy. This is not to say present operators do not account for 'thin' services: West Midlands PTE, for instance, have developed a monitoring system which helps management best adjust 'supply' to 'demand' (21).

The principal innovations which have recently emerged under the regulatory system involve ticketing, and revolve around the network concept. The London Travelcard has already been discussed. The PTEs all have similar arrangements, although the dramatic upswing in ridership in London through Travelcard, may be attributed to selling two whole networks together: the bus, and underground.

In West Midlands and West Yorkshire PTEs maximum off-peak fare schemes were introduced with vigorous marketing in the early 1980s and are reviewed by Harris (22), and Grimshaw (23) respectively. These schemes take advantage of the marginal cost of off-peak services, help reduce unit costs by spreading the peak, and by making better utilisation of off-peak buses, improve performance indicators. These schemes helped boost ridership in their areas, by the lower off-peak fares. The West Midlands scheme not only applied to individual fares, but also to its travelcard (a tactic now employed by LRT). Harris concluded that no significant loss of revenue resulted. A case study of West Yorkshire's services (24) concluded, using cost benefit analysis, that the integrated and co-ordinated network produces a direct financial to the operator, and a net social benefit to the community five times that.

Deregulation of stage services is likely to stifle these innovations,

and in Tyne and Wear's case to have a serious impact on the Metro.

Scale factors have contributed to the adoption of other innovations. Congestion poses a serious reliability problem for the Metropolitan operator, but this can be overcome through better control systems such as the radio-based systems used by South Yorkshire PTE and LRT. Small entrants would not be able to justify the investment in this technology. Likewise electronic passenger information systems - as exist on Tyne and Wear's Metro, and London's Underground - which may be applied to bus systems, are unlikely to be introduced by smaller operators.

Innovations in vehicle design could help reduce SRM and fuel costs. There is a trade-off here, since, like railways, the higher traction costs of electric generation compared to hydrocarbons is associated with lower SRM costs. The rising SRM element, has stimulated a renewal interest in electric traction. Overhead electrification using trolleybuses was phased out in Britain, largely in the 1950s. South Yorkshire PTE is pursuing their re-introduction in Doncaster and Rotherham. More ambitiously, West Midlands and Greater Manchester County Councils have made detailed plans for light rail systems, West Midlands PTE in addition have constructed a guided busway. Again, stage de-regulation would inhibit such innovations. The Docklands Light Railway is currently being built, and its construction is related to the development potential of London's East End.

The "Buses" White Paper, let alone the 1985 Act itself, severely reduced demand for new vehicles, so even modest design improvement programmes have been affected. Under de-regulation, initially the vehicles on the road will be of generally older vintage. However, there is a trade-off between capital and SRM costs, so this pattern would eventually break.

The scope for urban minibus operation has been exploited rapidly from 1984 by NBC, under the old regulatory system before de-regulation replaces it in October 1986. The economic feasibility of these remains unproven. Their known lower driver costs are a function of wage conditions in a recession, and as such perhaps a temporary phenomenon.

Electronic ticketing systems (ETS) have been installed by several public operators. Research at PCL (25) has shown that there is a lack of software to match existing hardware, so as to inform management decision-making from the data collected. This data is of reduced significance where off vehicle sales is of greater importance. Deregulation may accelerate the development of suitable software, although it is unlikely that ETS will be adopted by smaller operators.

Deregulation under the 1980 Transport Act

Deregulation under the 1980 Transport Act has already been referred to. This section will focus specifically on the complete price and quantity deregulation introduced onto express services, and in the trial areas.

The outcome on express services is described in an associated paper at this conference (9). Briefly, the total market grew substantially (Table 1b). The growth occurred mainly on long-distance trunk routes to and from London, and between other main centres. Low-density cross-country routes continued to decline, and experienced real fare increases in contrast to sharp falls on trunk routes. Both private and public sector operators gained traffic - the main loser being the rail network - but an attempt by private operators to compete through a nationwide network soon failed. However, individual private operators, generally operating higher-quality services, have enjoyed considerable success on specific routes. The 30-mile

limit also enabled a number of deregulated commuter express services into London to be established, although as stage service licensing subsequently became more liberal, most have been licensed in this form. Almost 400 vehicles now enter London daily. All sectors have experienced absolute growth, with the public sector having gained the larger share (60%).

In the trial areas all quantity regulation on local stage carriage services was removed. They were set-up at the initiative of local authorities covering the areas concerned:

- West and central Norfolk. A very low density rural area, with few opportunities for new commercial operation. Little change attributable to the trial area as such has been observed (26).
- East Devon. A higher density rural area, already with a moderately good level of service. Here also, few effects may be attributed to the trial area.
- The area in and around the city of Hereford. Here, a system of competitive tendering was introduced for the rural services, and fierce 'on-the-road' competition emerged on the city routes. The rural services aspect appears to have worked fairly well, enabling substantial cost reductions while retaining a broadly stable level of services. A very unstable pattern emerged in the city network in which higher frequencies and lower fares benefitted passengers, but with large financial losses for all operators estimated by Evans (27). Most competition on this network has now disappeared, leaving NBC once again in a strong position.

Overall, few conclusions can be drawn for general local service deregulation from these experiences. The express deregulation gave net benefits to users, and encouraged innovation, but in a highly elastic market which does not directly parallel that for local services. Of the three trial areas, only one produced major changes in services from which highly controversial interpretations were drawn in the White Paper. This limited experience cannot be projected elsewhere, and in particular cannot serve to indicate the likely future of services in the conurbations under deregulation.

Fiscal Restraint

The above performance trends and innovations which have recently emerged, have occurred at a time of increasing fiscal restraint on local government spending. In the UK, central government possesses sovereign power, but may discharge its functions through local authorities, principally the upper tier of local government. Local authorities are financed partly through rates - a local property tax - and partly, in recognition of their statutory responsibilities - through central government funds which are raised through taxes. Thus, they receive 'Rate Support Grant' (RSG) to provide a 'standard' level of service.

If local authorities' rate levels are deemed excessive, the present central administration is able to impose severe grant penalties in a bid to coerce them to follow its macro-economic policy. Furthermore, central government can limit the locally set rate levels, through its 'rate-capping' Act, being pursued for the first time in the current fiscal year. Supposedly as an economy measure, the 1985 Local Government Act abolished the GLC and the Metropolitan County Councils as from April 1986.

'Overspending' on a particular local authority budget head - eg housing - could attract grant penalties, if not rate capping, so affecting other areas of expenditure. Transport Supplementary Grant (TSG) provided by central government covered expenditure on capital (mainly highways related) and current account (mainly revenue support for transport services). However, from 1984/5 TSG became a capital-only grant, thereby removing a degree

of 'protection' for current transport expenditure, which now has to compete with other areas of local government expenditure. Under the 1985 Transport Act, the squeeze is to continue: local authorities would no longer be able to provide network support. Comprehensive network planning will be replaced by the more limited role of providing for specific social needs in competitive tendering arrangement. This provision, and the availability of concessionary fares for the elderly, disabled, and children (provided by local authorities at their discretion), would be subject to the external budgetary constraints imposed by central government on local authority expenditure.

Under the terms of the 1985 Act statutory school transport is to be retained, and local authorities have a responsibility to somehow relate it to any public transport which is being, or could be, provided. In a volatile deregulated environment, contract or tendered services may suddenly have to replace commercially run services. Public expenditure may rise accordingly and such fluctuations could make budgetary arrangements difficult to keep to. Given local authorities' statutory obligations concerning school transport, in some circumstances it may be cheaper to provide these under specific contract, rather than offer them as a tendered service on which other passengers may ride. Schoolchildren travelling under the statutory distance may have to pay more under the new competitive regime to meet the truer economic cost of service provision, although local authorities may now compensate operators for such concessionary fares, hitherto covered by cross-subsidy.

Local authorities' responses, and thereby those of operators, to the fiscal restraint regime just described have been varied. Many, principally those controlled by the central government's colour in rural areas, have adopted a cautious approach to revenue support payments, and thus a less interventionist line and reduced commitment to public transport. Others, principally those controlled by the opposition Labour party in urban areas, have been more defiant of Government policy, and have pointed to the 'travel needs' provisions of the 1968 and 1978 Transport Acts.

Following the Conservative Government's line on fiscal restraints, the "Buses" White Paper (page 3) focused on finances: "The financial problem is in the urban areas. The big subsidies are being paid in London and the metropolitan counties. In England these areas with 40 per cent of the population, account for over 80 per cent of revenue support to bus services and the bill has been rising rapidly from £117 million in 1978/9 to a budget figure of nearly £400 million in 1984/5. In the shire counties, in contrast, total revenue support payments have not increased dramatically and remain below £100 million."

The figures quoted are in money terms, which for the Mets would imply a doubling of support in real terms. Much of this increase has been directed towards reducing fares. In 1981, 47% of households in London and the Mets did not own a car, a figure falling to 33% for the rest of England (28).

"Buses" goes on to assert (page 54): "Many authorities proved unwilling to adjust their services as demand fell, so the pattern of services has in many plans become outmoded to the present day." The 'evidence' is that from 1972 to 1982 local authority bus passenger trips fell by 28%, but bus miles by only 12%. The authors surmise that this signifies a mismatch in supply/demand, and suppose: "...there is a strong prima facie case that in most urban areas there is potential for major improvements, through getting better utilisation of buses by adjusting the pattern of services to the pattern of demand."

This conclusion is, in fact, quite incorrect. Whilst it is true from the above that passenger boardings per bus mile have fallen by some 18% in

this period, average loadings have not fallen correspondingly. Boarding rates tell us nothing about an operator's efficiency, nor total passenger 'demand'. Loadings are measured by the ratio of passenger miles to bus miles. Average trip lengths increased by perhaps 15% over the period (29), i.e. passenger miles have fallen less than passenger trips. This would imply a fall in loadings of about 5%, a modest amount considering the impact of the rapid unemployment rise from 1979 and operator's limited ability to reduce fixed costs quickly.

Moreover, the operation of services with poor loadings is not necessarily a bad thing since public transport services ('supply') are not planned to cover only commercially viable demand (notionally the desire to travel coupled with the ability to pay), but also to cover social need (notionally the desire to travel, though without the ability to cover the economic costs). The Government recognises the latter through its tendered services provision in the 1985 Act. Hence, it is implicitly accepting that supply should not follow demand stepwise, but demand and need, thereby undermining its own argument concerning 'mismatch'. Passenger response to service is more complicated still. For it depends on factors such as choice of destinations available, time budgetting of activities within a household, and frequency of service - particularly important when traffic abstraction is likely to take the form of matching timetables between competitors in a bid to capture the market. Instances of the latter have been described in detail by Savage (5), particularly Chapter 7.

The 1983 Transport Act attempted to put a break on revenue support in the conurbations. It contains two principal elements. Firstly, a requirement for Transport Executives to present 3-year rolling plans, including evaluation of proposed policies and alternative options (including fares and services), updated annually. This planning framework looks set to flounder under deregulation. Secondly, the Act increased central government control over local authority spending resulting from 'protected expenditure levels' (PELs) and associated powers. The PELs are guidelines for revenue support, as specified by the Transport Secretary, below which revenue support cannot be legally challenged. If an authority gives support above the PEL - as indeed all Met Councils have - this is neither legal nor illegal, but is open to challenge in the courts by interested parties.

The 'value for money' of alternative plans prepared under this Act had to be assessed. The DTp supplied its own social cost benefit model (30). This not only consistently showed that Executives' preferred plans gave greater net social benefit than those implied by the PELs, but that greater benefit would accrue by lowering fares, even if this required reducing service levels.

These results, coupled with the statutory requirement for PTAs' to meet travel needs, diminished the likely success of any legal challenge to support levels - not that any were made. The Government's failure to curb public transport support levels in the conurbations led first to the creation of LRT with transfer of control to the Government, and secondly to the 1985 Transport Act. The latter was admitted by the Transport Secretary when questioned by the House of Commons Select Committee on Transport, 6th February 1985. Plans prepared under the 1983 Transport Act, and the subsequent course of events, have been considered elsewhere by the authors (31).

As the Met councils have been abolished, the role of PTA has been transferred to 'Joint Boards' composed of nominees drawn from Metropolitan District Councils. The 1985 Act permits any District to secede from the PTE if it wishes, and the Expenditure Limits (ELs) - replacing the PELs - will strictly limit expenditure on tendered services and concessionary fares.

Conclusions

All sectors of the British bus industry have recently improved their performance measures in a variety of ways (Table 3). The absolute values of those performance measures reflect the mix of services provided (stage, express, tours, contract, private hire), and also the environment in which these are run - especially with regard to the proportion of urban operation. Any sensible comparison between the various sectors of the British bus industry must take account of these factors. The time period considered is unique: stronger planning frameworks existed, whilst moves were made to introduce competition. Fiscal restraint on local authorities may have put pressure on municipal operators to reduce costs. Similarly, direct pressures were applied by central government to the nationalised sectors - NBC and SBG. Nonetheless, the 1978 Transport Act encouraged County Councils to increase revenue support to these operators by provoking these councils to consider their public transport responsibilities.

The 1983 Transport Act explicitly imposed a strategic planning framework on the PTEs and the London Transport Executive. The assessment method applied - which was required under this Act - ironically provided these operators, or rather their controlling authorities, with greater justification for their revenue support payments than hitherto. This undermined the Government's goal of reducing public expenditure.

The 1980 Transport Act liberalised local bus licensing. Following this, the private sector managed to capture a very modest increase in its market share (0.4% in three years), but in 1984 operated only 8% of stage mileage. More significantly this Act deregulated express services, following which the public sector increased its market share by 9%, and ran 79% of express mileage.

Whilst the Government should draw comfort from the performance improvements achieved, these pall by comparison to the increase in support payment which it would like to have seen reduced. The other results above ran counter to expectations or intentions. The results of trial area deregulation under the 1980 Transport Act are too limited and short run to draw wider conclusions with any accuracy.

Table 4 Planning Before and After the 1985 Transport Act

'Before'	'After'
1968 Transport Act (and Local Government Act 1974) established PTEs - planned integration of services; travel needs met (network revenue support). Metropolitan Councils became PTAs under 1974 Act.	Break-up of PTEs, removal of X-subs, 'uncommercial integration'; competition of uncommercial services (*); Local Government Act 1985 abolished GLC and Metropolitan councils.
1978 Transport Act - established public transport planning framework for non-Metropolitan counties; Travel needs assessed; concessionary fares for the elderly and disabled; school transport explicitly considered in plans (TPPs).	Removal of planning powers; as (*); statutory school transport to be 'integrated' with other services; availability of concessionary travel subject to 'rate capping', but child concessions 'permitted'.
1983 Transport Act - 3 year rolling planning framework (covering fare and service levels, network support, and evaluation of alternatives).	Planning framework to continue for tendered services; PELs replaced by ELs which strictly apply; as above for 1968/ 1974 Acts.

The 1985 Transport act is designed to rectify these 'failings'. A comparison of the planning framework before and after this Act is shown in Table 4. Not only is a substantial element of the industry to be privatised - the NBC - but stage deregulation will, by imposing a commercial remit on other operators, force them to behave like private companies. Transport planning will thus be displaced by market forces.

As a consequence of this, competitive confidentiality will reduce the information which operators will divulge, especially concerning cost and revenue structures. This is even being encouraged by the DTp: when local authorities make concessionary fares reimbursements, which must be offered to all operators on the same basis, operators are under no obligation to provide details on total passengers carried, their composition, nor revenues collected on commercial routes. Instead, local authorities will have to conduct surveys. The DTp suggests this is done on an operator's network. Yet, deregulation will result in sharp competition on specific corridors, and the characteristics of these commercial routes are unlikely to be mirrored on tendered services, especially with regard to fares. One intention of deregulation is to shake up present networks through the elimination of cross-subsidy, so how can the network concept remain?

The cost differences between public and private operators also remain speculative. Under deregulation, since national wage agreements would no longer apply, wage levels would adjust to more accurately reflect local labour markets. So, ironically, we are likely to witness a greater range of costs per bus mile, not a lesser.

The reduction in publicly-available data will of course imply that performance monitoring - so crucial to help evaluate the consequences of the 1985 Act - will be correspondingly more difficult. The DTp's Transport and Road Research Laboratory is embarking on a programme to collect detailed data from specific study areas. Hopefully, a sufficiently accurate profile of national trends can be made publicly available from this exercise, so that researchers will be able to draw their own conclusions.

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