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# THE TRANSPORT ECONOMIST

Volume 21 Number 1  
Spring 1994

The Journal of the Transport Economists' Group

REPORTS OF MEMBERS

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Laurie Baker, London Borough of Camden

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REPORTS OF MEETINGSPRIVATELY-FUNDED TOLL ROADS IN SYDNEY

Professor Gordon Mills, University of Sydney

The first meeting of the 1993/4 session was addressed by Gordon Mills, Professor of Economics at Sydney since 1976, and Director of the Centre for Microeconomic Policy Analysis.

He described the recent opening of three toll roads in the Sydney area. The Sydney urban area covers a similar area to that of Greater London (1600 square km), but with about half the population (3.0 million).

The recent history of private funding began with a new harbour crossing, to complement the world-famous bridge. The New South Wales government announced five alternative schemes for a new bridge. But cost and local opposition precluded construction. Later the government announced that a private consortium had proposed a tunnel: the government signed a subsidised build-operate-transfer (BOT) contract with that consortium, without calling for bids. The toll (presently A\$2, about £1, for both cars and trucks) is charged in the south-bound direction only.

After bidding competitions, two further BOT contracts were signed. Running due west from Sydney is the M4 route through Parramatta, some 48 kilometres in all, over a route safeguarded for this purpose since 1948. The outermost 26km and the innermost 13km had been built by the government itself. Under one of the BOT contracts, a private company provided the missing length of some 9km. The (only) toll plaza is placed on the innermost (and pre-existing) section. The M5 runs south-west from Sydney, ultimately providing a link to Canberra. Here, an inner section of the route was opened in two phases in 1992, but remains unlinked with the outer section built earlier under public funding. Both the privately-funded sections were completed ahead of schedule.

Table 1 summarises the main characteristics of the three existing schemes:

**Table 1: Privately-funded toll roads, New South Wales**

Road	Sydney Harbour Tunnel	M4	M5
Date opened	Aug 92	May 92	Aug 92 (stage 1)
No. of lanes	2 + 2	2 + 2 now (3 + 3 later)	2 + 2 (stage 1) 2 (stage 2)
Length of road (km)			
* new	2.3	10	stage 1: 8 stage 2: 5.5
* upgraded	-	11	
Length of connecting motorway	4 (N), 1 (S)	27	230 (approx.)

Table 2 lists the bidding and funding arrangements for the existing roads:

**Table 2: Bidding and funding arrangements, private toll roads, New South Wales**

Road	Sydney Harbour Tunnel	M4	M5
No. of bidders:			
* responses	1	8	8
* short list	1	3	2
Successful bidder:			
* company	SHTC	Statewide Roads	Interlink Roads
* backers	Transfield, Kumagai-Gumi	CMPS&F	Leighton Contractors Commonwealth Bank
* principal sources of funds	A\$400m in inflation-linked bonds, sold to investors; A\$200m grant from govt.	A\$236m borrowed from Commonwealth Bank.	A\$250m. from Bank; A\$35m govt. loans at 12%; A\$10m govt. grant; A\$5m further govt. grant
Operating period (years)	30	17	22

It is possible to use parts of either route without toll payment, if the section containing the toll plaza is avoided, although the quality of alternative routes probably discourages this. Current proposals aim to fill the gap between the two separate sections of the M5 (but without a further toll plaza on the new section), under a revised form of contract, in which the duration would be extended to 30 years from the 22 years found in the original schemes.

A further radial toll route is currently proposed, the M2, to serve the north-west area. It would incorporate some existing roads but would not have alternative roads avoiding tolls to the extent found on the M4 and M5. The government also proposes private participation in a long-distance road: the "Motorway Pacific", running north from Sydney to the Queensland border.

For each of the roads built so far, the terms of the contract do not seem to be especially onerous from the company's point of view. In the case of the harbour tunnel, the company incurred the construction-cost risk, and seemed to make a good job of construction. But, in effect, it faces no revenue risk.

Gordon Mills noted that there was little public disclosure of the terms of each of the three contracts.

The revision of the contract for the M5 road, agreed between the New South Wales government and Interlink Roads in June 1993, specifies the following changes:

- \* Interlink finances, constructs, and maintains, a western extension (estimated construction cost A\$65m).
- \* Interlink plans to issue infrastructure bonds, which have a tax advantage.
- \* The contract is increased to 30 years, to allow such issue.
- \* The government is to lend a further A\$50m at 7% p.a., to be repaid once Interlink's bank debt is cleared (in 17 years?).
- \* The current toll (A\$2 for cars) is to remain until March 1996, followed by increases in line with the consumer price index.

- \* No toll is to be charged on use of the new link (by itself).
- \* Once interlink has repaid all debt, and has reached an internal rate of return of 19%, 95% of any additional profit goes to government.
- \* Government receives 70% of any cost savings on construction of the new link.

Gordon Mills saw the possibility of significant divergence between profit and welfare outcomes. He also saw scope for more sophisticated tolling, and for price discrimination to ensure that consumer surplus gain was captured as a financial gain to the provider. He also saw some evidence of tacit subsidies through provision of public funding to the private bodies building the roads. There is also the possibility of direct subsidy through network effects. Placing toll plazas on an existing section of road (as in the M4 case) results in existing users who had made free use of that section now being required to pay a toll.

In respect of that and other situations, he referred briefly to some modelling he had undertaken, with heterogeneous users with high and low values of time choosing between high-and low-quality alternative routes.

In discussion, Dick Dunmore of Cooper & Lybrand suggested that public perception of the existence of the toll roads was fairly limited, thus affecting the overall use made of them.

Further analysis of the material covered in Gordon Mills' talk may be found in the following papers:

Mills, G. (1991) Commercial funding of transport infrastructure: lessons from some Australian cases Journal of Transport Economics and Policy, 25: pp. 279-298

Welfare and profit divergencies for tolled links in a road network. Working Paper No. 9, Centre for Microeconomic Policy Analysis, University of Sydney

Privately-owned toll roads: how profit and welfare effects can have opposite signs. Working Paper No. 10, Centre for Microeconomic Policy Analysis, University of Sydney

Copies of the working papers may be obtained from Professor Mills at the Centre for Microeconomic Policy Analysis, University of Sydney, NSW 2006, Australia.

## BUS DEREGULATION - REVERTING TO THE LONDON MODEL ?

Professor Peter White, Transport Studies Group, University of Westminster

The purpose of the talk given in October 1993 was to float ideas about bus deregulation, in the light of deregulation outside London since 1986 and its planned extension in the capital.<sup>1</sup>

### Background

#### **The 1985 Transport Act**

This introduced measures for the deregulation of buses outside London. It abolished road service licensing for local services (defined as those carrying passengers who travel less than 15 miles) but required their compulsory registration. Thus from then on there was no quantity control (price control having gone earlier).

Financial support for the network was now forbidden. However, "uncommercial" services could be provided at the local authorities discretion (and cost) through a system of compulsory competitive tendering. This meant that formal provision to apply cross-subsidy was eliminated.

With the abolition of the Metropolitan counties in April 1986, the level of spending on public transport was determined in those areas, at least initially, by central government. This led to very large fare increases in April 1986. Concessionary fares have continued, at the discretion of local authorities, but must include all operators.

Conversely, in London, no such split between "commercial" and "tendered" services applies, nor was deregulation under the 1985 Act applied to London. However, under the 1985 London Regional Transport Act, a system of route-by-route competitive tendering within a centrally planned network has been introduced.

<sup>1</sup> In November 1993 the Government announced that bus deregulation legislation would not be introduced but that London Bus subsidiaries would be privatised in 1994. Net cost tendering will be used whereby the operator keeps the receipts.

By mid-1993 there had been a growth in tendered services in London to a state where about half were directly operated by London Buses Ltd. and half were tendered (shared between London Buses and private operators).

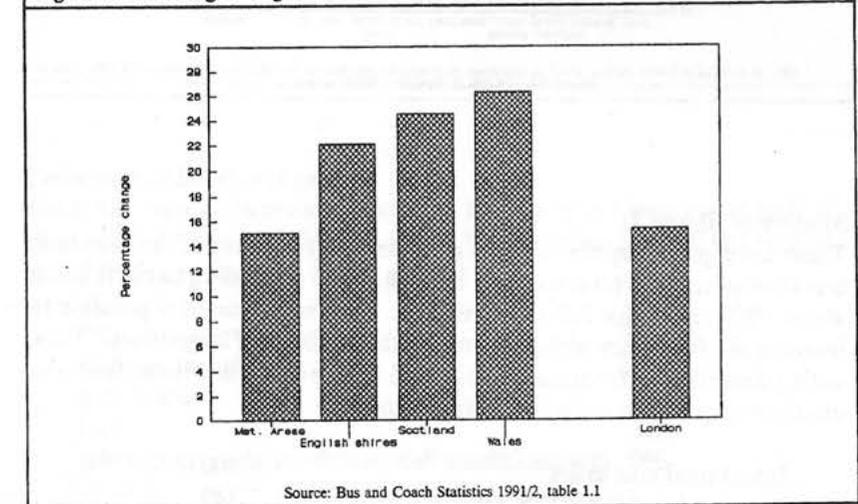
### Outcomes

Information is available separately for London, the metropolitan areas, the English Shires, Wales, and Scotland.

#### **Bus kilometres (figure 1)**

Between 1985/86 and 1991/92 bus kilometres increased in all areas. London and the Metropolitan Areas increased by about 15% with the rest of Great Britain increasing by over 20%.

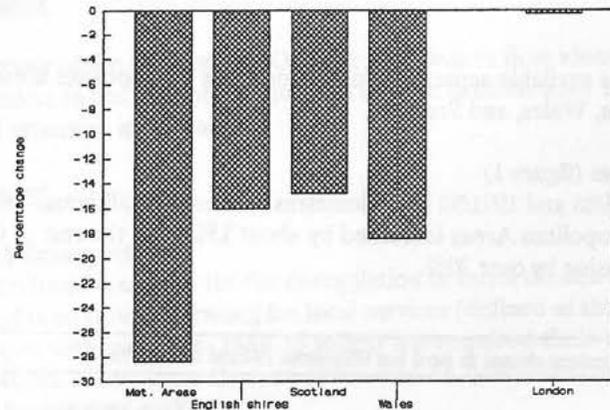
**Figure 1: Percentage change in local bus kilometres 1985/86 to 1991/92**



#### **Bus passenger trips (figure 2)**

If the growth in car ownership only were taken into account between 1985/86 and 1991/92, a fall of about 1½% per annum would have been expected. However, as shown in figure 2, all areas except London experienced much greater decline in bus journeys with the Metropolitan Areas falling by about 28% and other areas between 15 and 18%. London, on the other hand, had negligible change.

Figure 2: Percentage change in local bus passenger trips 1985/86 to 1991/92



Source: Bus and Coach Statistics 1991/2, table 1.2

### Minibuses (figure 3)

These have grown rapidly in urban areas and explain much of the growth in bus kilometres, the total cost per bus-kilometre (including capital) being about 70% of that for full-sized vehicles. With minibuses it is possible to increase the frequency without incurring the full costs of large buses. Thus, with a doubling of frequency (i.e. 100% increase in bus kilometres) the elasticity required to make this viable would be:

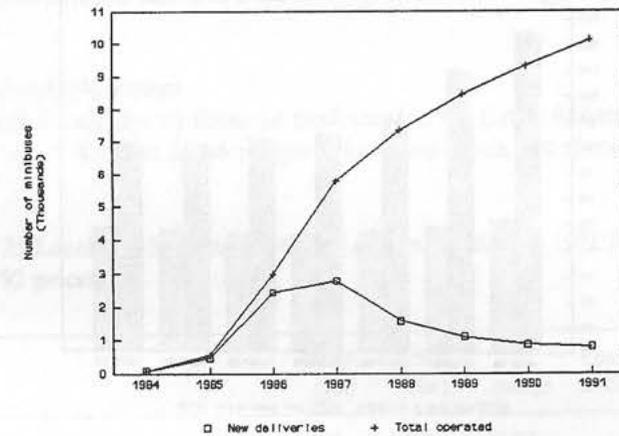
Initial total cost index	100
New total cost index (2 x 70)	140

Revenue (at same fares) must rise by 40%, therefore:

Required frequency elasticity (40/100)	+0.4
--	------

This is matched by observed growth in successful cases of minibus conversion, but not in all instances.

Figure 3: Growth in Use of Minibuses, 1984 to 1991



Source: TRL Contractor Report CR170: A catalogue of growth of minibuses in Great Britain 1984-88; updated to 1991.

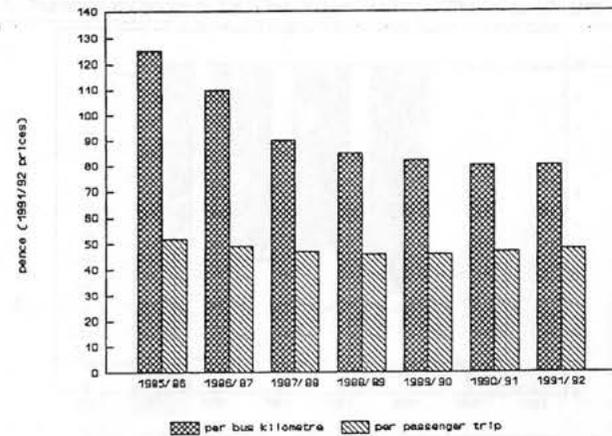
### Costs outside London (figure 4)

There has been an increase in local bus kilometres per member of staff of about 40% between 1985/86 and 1991/92 which has formed the largest contribution to reductions in cost per bus km.

Overall cost reduction	36%
staff productivity	20%
staff wages	4%
fuel	3%
other (overheads, minibuses, staff conditions, etc)	9%

Because bus passengers per local bus kilometre fell by 34%, the cost per passenger trip fell by only 2%.

Figure 4: Local bus service unit costs (exc. London) at 1991/92 prices



Source: Bus and Coach Statistics 1991/2, tables 4.1 and 4.2

#### Example of a time-series model

Recent work by Tyson on Metropolitan areas 1985/86 to 1989/90 indicates that the actual fall in passenger trips is much greater than would be expected from looking at a number of variables. The results shown in table 1 indicate that there was a fall about 11% greater than expected from the 1985/86 base.

Table 1: Total Bus Trips in English Metropolitan Areas 1985/86 to 1989/90

Variable	Effect	Change	Expected change in bus passenger trips
Population	Direct proportion	-0.6%	-12m (-0.6%)
Car ownership	360 trips lost per car	+20.3%	-214m (-10.3%)
Unemployment	230 trips per person	-46.7%	+93m (+4.5%)
Real fares	elasticity: -0.3	+29.9%	-206m (-10.0%)
Bus miles	elasticity: +0.5	+13.6%	+141m (+6.8%)
Total		-198m (-9.6%)	
Actual fall in trips		-427m (-20.7%)	

Source: W.J. Tyson *Bus Deregulation - Five Years On*, Report to AMA/PTEG, Dec. 1991

#### Fares Competition

There has been relatively little fare competition since deregulation but most competition has taken the form of increased frequency on existing routes.

#### Financial Performance

Changes in bus service financial performance for Great Britain, excluding London but with the London figures for comparison, are shown in table 2 below:

Table 2: Local Bus Services (outside London) 1985/86 to 1991/92 (1991/92 prices)

	1985/6 (£m)	1991/2 (£m)	change	Change in London 1985/6 to 1991/2
Passenger receipts	1,895	1,694	-10.6%	+5%
Concessionary fares compensation	300	314	+4.7%	+1%
Fares paid by passengers	1,595	1,380	-13.5%	+6%
Revenue support	417	149	-64.3%	
Total operator income	2,312	1,843	-20.3%	-12%
Total passenger journeys	4,489	3,520	-21.6%	+0.3%
Total operating costs (exc. depreciation)	2,226	1,700	-23.6%	-12%
Operator surplus before depreciation	86	143	+66.3%	n/a
Total operating costs (inc. depreciation)	n/a	1,821	n/a	-8%
Net surplus after depreciation	n/a	143	n/a	
Profit (%)	n/a	1.2	n/a	
Support per trip			-53%	-61%

Although operating costs per bus km. have fallen by a greater amount outside London, these data suggest that deregulation has not produced improvements for bus passengers. In London, passenger receipts actually increased and the revenue support per trip has fallen by a larger amount. The real cost per passenger in London fell by 15%.

#### Conclusions

Peter summed up by posing two questions:

- \* do we deregulate in London ?
- \* do we keep the same system outside London or, especially in large cities, revert to the London model ?

He suggested that the London pattern was more appropriate both in London and other large cities, although there is a need for more local opportunities for operator initiatives within the London system.

### Discussion

Wynne Jones (Nottingham CC) made three points:

1. Because Metropolitan counties opposed abolition the preparations for deregulation were too few and too late. For example, in Liverpool, the bus company was not ready to survive.
2. The operators in Merseyside were in competition with the PTE on price - the tendered services undercut commercial rates.
3. Travelcard opportunities were not possible because they were set to pre-deregulation fare levels.

In answer, PW accepted the first point and made the following observations:

2. Most tendered services in the shires charge similar fares to commercial operations;
3. Travelcard gives ease of use and therefore buses may benefit in London. On tendered buses travelcard can be registered on entry and a travel diary survey can be used to estimate total use.

Roy Turner (Transmark) asked (a) with the growth in incomes, car ownership increases but, car use cannot grow much in London; (b) what effect would bus deregulation have on London Underground and (c) what is the impact of BR privatisation ?

PW said that with (a) income elasticity means a growth in all travel and that restraint could keep public transport share high. On (b) and (c), there could be transfer to those modes which offer the greatest amount of stability.

John Cartledge (London Regional Passengers Committee) questioned the validity of the figures that had been produced. There was most certainty about the revenue figures but some of the passenger figures are doubtful and would like more information on trip lengths and passenger miles. JC asked what was the sampling process? PW said that the process had been tightened-up but at least one could get information in London. Elsewhere, few PTEs and no counties publish passenger totals for specific named areas.

Another member suggested that on minibuses most growth was in the off-peak: leisure, shopping, personal business and that there was some diversion from the car. This effect is likely to be due to service levels and better penetration although there was very often a dislike of minibuses.

Peter Collins (LT) expressed concern about applying the deregulation model outside London to the capital, particularly on stability of service provision, travelcard, traffic congestion (DoT looking at rationing bus stops) and passenger information/timetabling. However, he summed up his view of how bus travel should be in the future:

- \* bus arrival information (e.g. the Countdown experiment)
- \* full DIPTAC standards on all buses
- \* smartcard ticketing (travelcard or stored value)
- \* bus speeds improved along priority routes
- \* passenger trip information (smart cards validating Travelcards on boarding)

PC was not sure whether this would happen with deregulation but now he was uncertain whether deregulation itself would take place.

Further statistics are available from:

LT Traffic Trends 1971-90: R273, London Transport, February 1993

Bus and Coach Statistics Great Britain 1991-92: Department of Transport  
The 1992/3 report has been published subsequently. Some decline in ridership is evident in all areas, but the relative differences between London and other areas are very similar to those shown for the period to 1991/92.

Report by Laurie Baker, Principal Transport Planner, London Borough of Camden

## PUBLIC TRANSPORT IN EASTERN EUROPE - WARSAW

Roger McGlynn, WS Atkins Planning Consultants

The presentation reported on recent public transport studies in Warsaw and drew parallels with situations elsewhere in Eastern Europe including Moscow, Bucharest and Budapest. The talk and subsequent discussion focused on institutional constraints and funding issues.

Warsaw, the capital of Poland, has a population of 1.7 million out of a national total of 38 million. Following wide scale destruction in the Second World War the city was rebuilt at a relatively low density. It has a similar physical size to Paris, but only a quarter of its population. For public transport there is a heavy dependence on bus and tram. Trolley bus is a minor mode, and an initial stage of a metro system is under construction. (See Table 1).

**Table 1: Characteristics of Warsaw**

Area (sq Km)		485
Population (1991) (m)		1.66
Employment (m)		0.67
Bus	- Lines (No.)	164
	- Fleet (No.)	1,682
Route Lengths (Km)		2,236
Tram	- Lines	30
	- Fleet	900
Route Length (Km)		430
Trolleybus	- Lines	1
	- Fleet	29
Route Length (Km)		12
Metro	- Lines	under construction

### Problems and Key Issues

In common with other central and eastern european countries following the fall of communism, Poland's economy suffered high inflation, high wage demands and recession. The recession has meant that state transport

enterprises and local authorities have been starved of funds for all categories of services. Some growth was experienced in 1992, when the economy may have turned the corner.

Appropriate financial mechanisms were not in place when responsibility for public transport finance was devolved from Central Government. The local authority was required to take over a large public transport system which was previously heavily subsidized and was now in need of refurbishment. In common with other cities (eg. Moscow, Bucharest), the authorities continue to prefer to fund glamorous projects (eg. Metro), and hence conventional public transport has been starved of funds. Moves towards privatization of MZK, the public transport operator, may lead to greater efficiency, but there continues to be a fierce debate on the erosion of the social role of public transport, the need to maintain levels of service to counter increased car usage, and the employment impact of changing the work practices of a generation.

There is little traffic management and no parking control. Car ownership has increased in recent years due to subsidised local production and an influx of second hand cars from western Europe. At 265 cars per 1000 population, car ownership is approaching a level similar to some western European cities.

There has been no systematic monitoring of public transport usage. Patronage decreased by 18% between 1987 and 1992, and a high level of fare evasion is thought to exist (15-20%). Warsaw is a city with a transport system in a vicious cycle of decay. Lack of investment is leading to a decline in service while lack of firm policies to favour public transport at a time when car ownership is increasing all combine to reduce patronage and put greater financial pressure on the operator. Such a decline is familiar to cities throughout the world but in Eastern Europe the situation is heightened by the pace and complexity of change in economic, institutional and financial frameworks within which public transport operates.

### Reshaping City Transport

It is clear that there is no panacea to overcome the transport problems in eastern European cities. Even to tackle short term needs there are a number of components which must combine to achieve lasting solutions.

Short term investment programmes, such as those being promoted by EBRD for Warsaw, Budapest and Sofia, are an essential palliative. They will achieve some lasting benefits but essentially focus on overcoming the neglect of recent years and restoring transport infrastructure in order to arrest further decline - in effect buying time until hoped for economic recovery is realized.

Through close liaison with a 'task force' of local officials WS Atkins developed a programme suitable for finance through a EBRD loan. It emerged that the disbursement of such a loan must be part of a broader approach to transport and traffic management.

The Atkins team prepared a responsibility matrix to identify gaps and overlaps across the entire range of sub-sector responsibilities (eg. land use, traffic, public transport, management, road safety) and all stages of implementation (eg. policy formulation, finance, through all stages of projects and monitoring).

When the Atkins work began in late 1992:

- \* there was an absence of co-ordination between National rail and bus operators and MZK;
- \* responsibility for road maintenance and traffic management on main roads lay with the regional authority rather than the city;
- \* responsibility for local roads lay with local districts; and
- \* road safety appeared not to fall within the responsibility of any specific organisation.

Poor co-ordination and lack of appropriate institutions were identified as potentially the greatest barriers to the improvement of transport operations and implementation of an investment programme in the short term. However, the situation rapidly improved.

A condition of the EBRD loan is that public transport should be restricted and subsidy should be reduced. As a first step a city Board of Transport was established in January 1993 to provide a regulatory framework for all public transport in the city and to pave the way for private sector participation in service provision. MZK now provides services under contract to the Board of Transport. From January 1994 further changes

were made to establish bus, tram, and social activities as separate businesses within MZK.

Warsaw's 1982 Master Plan was replaced by an Interim Plan adopted in 1992. The old plan was no longer appropriate as the state is no longer the only developer and the Local Self Government Act of 1990 changed responsibilities for planning and development control.

However, the new master plan has the same transport plan as before. The Municipality is a strategic planning authority but the eight districts control development and make their own local plans. Links between the two are weak and decision taking is slow. An integrated approach to land use and transport planning is an urgent priority.

A key question is whether the Warsaw municipality can afford a loan. The City Council is 90% funded from the national treasury and has limited powers to increase funding. There has been no forward budget planning so it is hazardous to try to look ahead to determine what level of loan could be supported.

From a preliminary evaluation of 30 possible components of an investment programme a short list of worthwhile projects was drawn up in March 1993. Following detailed technical, financial and economic evaluation the investment programme was presented in August 1993.

Objectives for the investment programme include:

- \* to improve the reliability and supply of surface public transport services over the period 1993-1998
- \* to increase operational efficiency of public transport through increasing revenue and reducing costs
- \* to improve environmental quality of central Warsaw
- \* to introduce low cost improvements that achieve significant cost savings or revenue increases.

The short term investment programme could potentially include the following components:

- \* purchase of new buses to replace parts of a fleet when 28 per cent are beyond the normal service life of 9 years
- \* renewal and repair of tram tracks where a backlog of some 55km of track replacement exists
- \* introduce a series of improvements to the electro-mechanical propulsion systems of trams to overcome unacceptable levels of failure and to achieve energy savings
- \* introduce automatic ticketing/monitoring equipment to improve fare capture
- \* improve traffic signal control to achieve priorities for trams and to enable the introduction of UTC
- \* replace deformed road surfaces on main bus corridors
- \* introduce a system of paid on-street parking in the CBD
- \* technical co-operation

### Key Lessons

As a result of the work undertaken in Poland and elsewhere a number of key lessons in public transport 'first aid' had been learned:

- \* problems were often common to many cities;
- \* investment is needed to overcome recent neglect;
- \* increasing car ownership and use threaten the continued dominance of public transport;
- \* there is lack of experience in traffic management and restraint;
- \* the lender of funds imposes conditions which fundamentally affect the types of project suitable for financing;
- \* a loan may be used as a lever to achieve a general shift in urban transport policy;

- \* loans must be matched to municipal financial capacity;
- \* an appropriate institutional framework must exist for implementation; and
- \* technical co-operation is often essential to ensure effective implementation.

Generally, implementation of the development process is likely to be hindered by recent or ongoing local government reform, financial uncertainty, a protracted decision making process, and a changing public transport administration.

The EBRD has effectively brought together a development bank and a merchant bank. The reorganisation of EBRD has resulted in a policy shift towards a greater concentration on the private sector projects which produce strong revenue streams and a move away from public sector infrastructure projects which require government sovereign guarantee.

### **Discussion**

Beginning the discussion, Ahmand Fahramand (Consultant) enquired further about the restructuring of EBRD. What is its attitude to institutional building? Does it have the voice of a financier and not pro-development? Is there an emphasis on privatisation and restructuring for the sake of it? In responding, the speaker (McGlynn) said the bank does not see itself in that way. It is a quasi-commercial bank, which is currently funding things which other banks would not fund. They have a stick and carrot approach: imposing conditions on a loan, but offering technical assistance through PHARE (and TACIS). PHARE and TACIS are the EC funds established to assist in the transition to market economics in central/eastern Europe and the former Soviet Union respectively. EBRD works closely with both, in terms of identification and preparation of technical assistance projects related to its investment programmes.

Peter White (University of Westminster) commented that the European Investment Bank were contributing to the funding of the Jubilee Line. McGlynn said EBRD was established by the EC member states and is active in E. Europe. Loans are orientated towards the fixed asset components of infrastructure projects and never exceed 50 per cent of the total.

Peter Burgess (consultant) had recently worked in Kaunas in Lithuania and Riga in Latvia. The situation in Lithuania appeared to be more difficult than the picture painted of Warsaw. Half a million people live in Kaunas where there are pot holes, half built bridges and poor street lighting. Funds have run out. Warsaw by comparison appeared not to be in imminent crisis. He enquired whether there was any obvious foreign exchange saving from investment in public transport.

Continuing, Burgess said in Lithuania the cost of fuel was 80 to 100 times more than three years ago, but was still only two-thirds of the world market price. Car usage had halved. He enquired about the applicability of conventional cost benefit analysis. McGlynn agreed that Warsaw was not as badly off as cities further east. There was however a need to take action in the short term before resurgence in the economy takes hold. Fuel used to come from Russia. Hence prices have increased, holding back traffic growth. Car ownership has increased, but usage less so, based on limited data. Over the 15 months of the Atkins study, traffic had increased noticeably. A new transport study undertaken during the summer was expected to yield more information. Cost benefit analysis was a new concept in Poland. However the work for EBRD is primarily based on financial analysis, with economic rate of return as secondary. Burgess commented that in Latvia EBRD required economic analysis for assessment of a road project. McGlynn said in Poland that if it was not a toll road then it could only go ahead with a guarantee. The Ministry of Finance had said it would issue no more sovereign guarantees, though perhaps things would be better next year.

John Cartledge (London Transport Users' Committee) asked how we might get an 8000% increase in fuel prices here! He continued to say that he had visited Berlin, which he realised may not be typical. What was the level of public transport provision compared with cities in the west. McGlynn replied that many of these cities had enviable public transport systems. Warsaw had the advantage of a tram system which had an 80% segregated right of way, but in contrast with the UK, some would like to replace this with roads. Level of service to users has been a priority. It has been cheap, but with a poor level of comfort. But the problem is that level of operation could not be sustained.

John Cartledge enquired why there appeared to be so little political commitment to ensure that public transport is not thrown away.

McGlynn said there is a huge political will to retain the public transport system. The conflict in Warsaw was on restructuring and the threat of job losses. This has caused measures to be stalled.

Peter White then introduced Jacek Malasek, who was nearing the end of a three month transport related study tour, based at the University of Westminster. Jacek was in general agreement with McGlynn's findings and conclusions. He said that trams worked well in Warsaw, but neither they nor buses received any priority at signals which should be remedied. He believed public transport should be given the highest priority in Poland, but it was hard to find this expressed in central or local Government. Poland should try not to follow the mistakes of the west. Fourteen years ago, car ownership in Warsaw was around 120 cars/1000 population, hence there was a perceived need to improve public transport. However, the decision makers wanted to develop an underground system, but the city was not wealthy enough for such a development and it was a big mistake. But having started the project it should be finished or adapted for use as a tramway.

On transport and restructuring, a problem was that not enough private operators want to invest in public transport. Inflation was falling but is still at avoid 40% this year. People choose to invest in commerce where the returns are greater. Banks do not want to give loans to public transport operators because they too do not believe in its profitability, and prefer to invest in more reliable projects. Currently there is not much money available. In Jacek's opinion it should be spent in finishing what had already been started. Then try to impose management and traffic control.

On the potential 60 million ecu loan from EBRD, he said 80 million ecu would not be enough. It would not be enough to buy new buses, nor to complete the metro. Furthermore, Warsaw has had some difficulty with repayment of loans.

In response, McGlynn said following an initial preoccupation with industrial restructuring and privatisation in E. Europe, EC, EBRD and the World Bank had started turning their attention to urban infrastructure, and hence transport. He agreed the issue of the metro was very political. A World Bank report had recommended mothballing the metro as it would always be a millstone to be Municipality, but this was unacceptable to Government. This fundamental disagreement had slowed down assistance for the conventional public transport system. With regard to the prospective EBRD loan it was realised that the small amount of money

could only tackle some of the immediate infrastructure problems and that much more was needed, both in terms of policy and investment, to overcome the city's transport problems.

On the shortage of funds suggested by Jacek, McGlynn said that the Atkins team had looked for low cost projects with good returns. Replacement of 200 traffic controllers can save a lot of money in maintenance. Similarly replacing tram propulsion systems would save maintenance expenditure which in due course could permit the purchase of new trams. Traffic management would produce an economic benefit but not a financial gain.

John Cartledge suggested a swop. Warsaw should take some of our bus entrepreneurs and we should take their pro-public transport politicians.

In an exchange of views, Jacek said the World Bank would decide in May 1994 whether to loan \$400 million for transport improvements in six Polish towns, the loan being guaranteed by the Polish government. McGlynn confirmed his earlier statement that a major constraint on such loans would be securing sovereign guarantees from the Government of Poland.

Don Box (Consultant) felt that to set up institutions first then to fit operations to the institutions was to put the cart before the horse. He had experience of railways in Bulgaria where he thought the lessons were much the same. The public transport operators had a bad and worsening financial situation which had arisen out of low tariffs on public transport because of social reasons. This was difficult to break into in a poor country with poor wages. Matters deteriorated because no money was spent on removals and repair. There was a tendency to reduce labour, but this had little effect when labour made up only 27% of cost. There was a need to buy new locomotives or repair old ones, but the purchase of imported materials and rolling stock is very expensive for the local economy. Under ComEcon there was a tendency for countries to work together, eg. Czech locos and Bulgarian coaches. But this had now broken down, which was a retrograde step. There was now a need for countries to supply their own needs as far as possible. McGlynn agreed.

On car ownership and usage Geoff Mileham (NSE) thought a key issue in Poland was that the public would not be in favour of additional traffic and parking regulations because they would be seen to limit individual freedom which had only recently been won. The public also had a poor view of the police, and hence the tendency towards parking freedom.

In Poznan, Mileham noted there were good rural roads, much transformed since 1977. Jacek said that Poznan was the best organized district in Poland. In general there were no problems with inter city connections. While there were no motorways yet, some may appear with World Bank funding, and others with private funding, if the investment was profitable.

Report by Ian Gilliver, WS Atkins Planning Consultants

## SCHOOL TRANSPORT AND CONGESTION

### Sian Thornthwaite, Independent Consultant

Sian Thornthwaite introduced her talk in December by trying to define what is meant by congestion. The dictionary definition is simply an overcrowded condition. However, people's perception of what amounts to congestion will vary according to their individual experience.

Congestion is of concern due to the higher fuel usage and pollution costs resulting from low vehicle speeds. But the most noticeable effect of congestion for the majority of people is the increase in journey times it causes. The direct time costs of urban congestion have been estimated at £3 billion per annum by the British Road Federation.

However, the Confederation of British Industry includes other costs, such as the extra margin of time that must be allowed to meet delivery schedules, in their estimate. They also include the cost of the extra vehicles and drivers, fuel, maintenance, and road repairs that are involved, as well as costs associated with stress related illnesses and reductions in productivity caused by pollution. Thus the CBI estimated in 1989 that the annual cost to the British economy each year of congestion is approximately £15 billion.

Sian Thornthwaite next went on to discuss how much the school journey actually contributes to congestion, by looking at how children travel to school. In June 1993, surveys of local education authorities (LEAs) suggested that nationally some 1.4 million pupils - approximately 16% of the school population - receive school transport. National surveys also suggest that some 2.1 million pupils travel to school by car each day with another 4 million walking. Table 1 shows the percentage of education journeys made by different modes according to four surveys carried out over the past two decades.

**Table 1 - How Children Travel to School**

Mode	% of education journeys in			
	1975/6	1986/7	1990	1993
Rail	0.8	0.7	-	-
Bus	19.9	20.0	20.2	18.0
Car	10.6	15.7	20.0	34.0
Cycle	4.0	3.5	1.3	-
Walk	64.3	59.5	58.6	48.0
Other	0.4	0.6	-	-
Number	43,103	30,405	1,001	10,702

Survey data also suggests that car use is higher in the morning, with typically a 5-10% shift away from car use for the afternoon journey.

The most worrying trend is the annual increase in the proportion of pupils travelling to school by car - approximately 1%, which is equivalent to an extra 20,000 pupils each year.

### Reasons for Increasing Car Use

Sian Thornthwaite believes that this increase in car use for the school journey can be attributed to a combination of 'can', 'need' and 'want' factors.

#### "Can" Factor

Transport Statistics Great Britain shows that in 1962 more than two thirds of households had no car. By 1990 only a third of households were without a car. However, even more important in terms of the school journey, is the increase in the proportion of households with regular use of two or more cars - from only 3% in 1962 to almost 20% in 1990. It is evident that increasing numbers of parents are able to transport their children to school by car.

#### "Need" Factor

The average length of the journey to school is increasing. Legislation introduced since 1980 has brought about a fundamental change in education provision, with the encouragement of parental choice of school.

Only those pupils who live further than the minimum walking distance from their nearest school are eligible for free transport. (Minimum walking distances are defined as two miles for children under eight years of age and three miles for older children.)

Transporting children to and from school by car is also perceived as necessary for reasons of safety and security. The One False Move .... study by Hillman in 1990 found that the main concern of primary school parents was danger from traffic. However, fear of molestation is also a significant factor.

Ironically, parents are themselves increasing the perception of traffic danger by taking their children to school and many people argue that the congestion at school entrances increases the risk of injury to children. However, ROSPA (the Royal Society for the Prevention of Accidents) argues that congested school entrances actually reduce the severity of many accidents since they result in lower vehicle speeds.

Table 2 show the most recent figures for school journey casualties in Great Britain. In 1992, 42 pupils were killed on the journey to or from school, with a total of 8,277 casualties - approximately 20% of all child road accident casualties. Pedestrians and cyclists account for over 80% of school journey fatalities and over three quarters of all school journey casualties, even though fewer than half of all pupils walk or cycle to and from school. However, it is statistically much safer to travel to school by bus rather than car.

**Table 2 - School Journey Casualties, Great Britain, 1992 (<16 years)**

Model	Fatal	Serious	Slight	Total
Pedestrian	31	1,087	4,022	5,140
Cyclist	4	111	977	1,092
2 wheeled motor vehicles	2	11	42	55
Car	3	84	1,331	1,418
Bus	1	23	513	537
Other	1	2	32	35
<b>Total</b>	<b>42</b>	<b>1,318</b>	<b>6,917</b>	<b>8,277</b>

Perhaps another reason why parents perceive a need to take their children to school is the cost of bus fares. It is well known that people perceive the cost of car travel to be lower than the actual cost of bus fares and if a half fare scheme is not available this may well encourage parents to opt for the car.

#### **"Want" Factor**

Like most people many pupils - and their parents - are fundamentally lazy. It is often quicker to go by car, rather than walk with children, to school. In addition, it is often more convenient since the school journey can be linked to other trips - to work, shopping etc.

There are high costs associated with this use of the car for school journeys. The Greater London Travel Survey in 1981 reported that educational escort trips i.e. children being driven to school accounted for almost 9% of vehicle mileage in greater London between 7am and 10am.

Hillman attributed 10% of peak hour congestion to the school journey. This represents a cost of about £1.5 billion per annum using the CBI figures. In comparison, nationally local education authorities spend only £400 million annually on the provision of school transport.

#### **Reducing Journeys by Car**

Sian Thornthwaite investigated the scope for reducing school journeys made by car by looking at the results from a number of recent surveys.

#### **Berkshire Survey**

Berkshire County Council surveyed almost 11,000 pupils in five areas of the country in march 1993. 10,702 pupils responded, of whom 34% - 3,594 pupils - travelled to school by car. However, the average occupancy of each car was 1.5 pupils, so a total of 2,381 cars were used for the school journey in these areas.

The council were specifically looking at the scope for reducing peak hour congestion and concluded that the scope for reducing car usage during the morning peak as a result of the school journey was limited. Some 43% of the school journeys were linked to work journeys and these journeys would be likely to continue to be made by car.

### Hertfordshire Survey

Hertfordshire surveyed 5,000 pupils and school staff in the Hemel Hempstead area in May 1993 of which 3,537 responded (389 of these were staff). They found that 37.1% of pupils walked, 0.7% cycled, 4.6% travelled by bus and 61% by car (the survey included independent schools in the area).

Table 3 shows the reasons given by pupils for not walking or cycling to school regularly. Of the 186 respondents who gave 'other' as a reason for not walking - 104 gave a combination of the too dangerous, too far, not old enough - but 63 admitted to being too lazy to walk to school!

**Table 3 - Reasons for not Walking or Cycling to School Regularly**

	Walk Regularly	Cycle Regularly
Not old enough	7.1%	19.9%
Too far	56.1%	26.4%
Too dangerous	4.5%	12.0%
Other	23.3%	35.5%
No response	9.0%	6.2%

More than 100 of those who do not cycle regularly, said they were not allowed to cycle to school without a cycling proficiency test or that there were no facilities at schools for bikes.

### High Wycombe Survey

Halcrow Fox were appointed in February 1992 to look at the scope to reduce peak hour congestion in the town of High Wycombe. They found that overall private vehicle education trips accounted for 17% of the total morning peak hour traffic.

In this survey the majority of car drivers who take secondary school pupils to school go on to another location - 42% continue to work, 21% to another school and 2% go shopping or visiting.

Halcrow Fox concluded that many of the car trips to secondary schools would be made regardless of changes in school travel policies, as they are fundamentally work trips. Thus, they estimated that the potential reduction would be 60% of secondary school car trips and 40% of primary school car

trips and they concluded that a potential 3% reduction in travel time could be achieved by measures such as free school bus passes for all school children and new cycle routes. The potential time savings were valued at £500,000 but it was estimated that an additional £23 million per annum would have to be spent on school transport to achieve this.

Sian Thornthwaite believes that if we wish to reduce car usage for the school journey the objective must be wider than simply reducing congestion. We must seek to improve pedestrian safety, to encourage healthier modes of travel and to offer children more independence. These aims could be achieved by implementing safe routes to school, widening the provision of free school transport, or lowering bus fares. However, it is difficult to attempt to offset the costs of such measures since the benefits they bring are largely unquantifiable.

More optimistically, other countries, most notably the Netherlands, have managed to achieve higher rates of cycling and walking to school and their accident rates have not suffered. However, in these countries the school journey is considered alongside other journey purposes such as work and shopping, when it comes to encouraging people to use a mode other than car.

Sian Thornthwaite concluded her talk by summarising the main problems which must be overcome in order to reduce car usage for the school journey and by offering some solutions to these problems.

Recent education legislation does nothing to encourage a reduction in car use for the journey to school. The current pattern of education provision - encouraging more parental choice - needs to be reviewed. School journeys are getting longer and since there is no extra provision for public transport there is often little choice but to use the car for such journeys. Such a system is increasingly divisive, does nothing to achieve the governments aims of reducing child road accidents and completely ignores any thoughts of a sustainable transport policy.

Recent education legislation has also reduced local authority control over school starting and finishing times. If school times were altered so that it was no longer possible to drop children off on the way to work perhaps buses would be used more efficiently and the overall car journey length reduced since the journey to work would no longer be extended to include the school run.

Finally, there is the problem of parental attitudes despite statistical evidence to the contrary, it seems to be a widely held misconception among parents that children are safer wearing seat belts in a car than travelling by bus.

Sian Thornthwaite offered a number of solutions to these problems to help achieve a reduction in car usage, namely:

- \* a change in legislation, possibly back to catchment area schools;
- \* including transport implications in any planning decisions relating to school places or the building of new schools;
- \* returning the control of school session times to LEAs;
- \* making free school transport more widely available. Many of the Scottish authorities have lower walking distances and their buses are used, however this could have high costs for local authorities;
- \* making parents more aware of the safety record of buses in relation to cars; and
- \* implementing safe routes to school - especially for shorter, potentially heavily used roads.

### Discussion

Tony Flowerdew (Consultant) asked whether decisions made in the planning of new towns included the siting of primary schools within walking distance, where possible, and whether such planning solutions had been more successful. Sian Thornthwaite replied that there was some evidence, based on Berkshire study that cycling and walking had been encouraged in Bracknell but on the whole the modal split was not markedly different from the rest of Berkshire.

Peter White (University of Westminster) asked what happened at 4pm when the journey home from school did not coincide with the journey home from work. To which Sian Thornthwaite replied that many pupils switch to walking or the bus for the afternoon journey. When Jo Martin (WSA) wanted to know why, if pupils could get the bus home, they did not use it in the mornings, Sian Thornthwaite replied that it was often a case of

convincing the parents they did not need to drop their children off. Peter White also commented that buses tend to be more crowded in the morning peak, so it is better for bus operators if children only use the bus in the afternoon when the peak is more staggered.

Tony Flowerdew asked whether there was a difference in modal split between the summer and winter, according to whether children were able to travel home in daylight. Sian Thornthwaite replied that the most significant difference was according to whether it was raining.

Responding to a question from Geoff Mileham (BR International) about the Netherlands, Sian Thornthwaite replied that it had been difficult to encourage cycling in some areas but the government there had taken a much firmer line. It is also important to note that the distances involved are relatively short - 80% of journeys to primary schools are within one mile.

When asked by Peter White about the possibility of encouraging car sharing for the journey to school, Sian Thornthwaite replied that it was already happening but parents had to beware of overloading cars.

Tony Flowerdew observed that many hospitals now charge for car parking and he thought that charging for parking might be one way of discouraging car use for the school journey, but Sian Thornthwaite replied that not many schools have spare car parking space and in any case, parents often do not park but simply drop off children. Don Box suggested that it might be a possible deterrent to older children who drive themselves to school, but Sian Thornthwaite replied these pupils are often controlled to some extent already because many schools have rules about who can park on the ground simply because there is insufficient parking space.

Sian Thornthwaite thought a better way of determining how to discourage car use might be to look at what circumstances give rise to the minimum use of cars. She suggested that compact catchment areas encourage children to walk since many children walk similar routes, so their parents are less likely to fear for their personal safety.

Don Box gave the example of the Scottish island of Arran as one place where school transport has been successful since the whole island is served by school bus. Sian Thornthwaite suggested this is because the Scottish authorities have been more proactive with schools transport.

Another approach to school transport was adopted by the Isle of Man which completely abolished free transport and now charges ten pence per journey instead. In Jersey they have considerably reduced the minimum walking distances, in an attempt to encourage the use of school buses. Initially, this was very successful but later results have been more mixed.

A. Fahraman wanted to know whether if an economic assessment had been carried out for the High Wycombe study using say, URECA, this would have given rise to more benefit. Sian Thornthwaite thought that more items could have been included in the analysis, but in the end the problem is that the £2.3 million required for the extra school transport has to be paid for by the council who would not gain directly from any of the benefits of reduced congestion.

Peter White asked whether the Isle of Man flat fare could set a precedent for the rest of the UK but Sian Thornthwaite said that flat fare proposals in 1973 were defeated by the church lobby in 1980, since denominational schools would lose the right to free transport they currently enjoy.

Peter Jones (University of Westminster) brought up the subject of double summer time, since it has been shown that statistically children are safer walking to school than going home but both Andrew Spencer and Don Box thought that this might well be because children are less likely to go directly home in the afternoon and often tend to play and dawdle on the way home from school thus exposing themselves to greater risk.

The discussion next turned to the subject of the cost of school transport, Sian Thornthwaite pointed out that in fact one third of school transport expenditure goes on special needs pupils. Andrew Spencer asked whether the statutory obligation to provide school transport meant that the transport had to be door-to-door. Sian Thornthwaite replied that the transport must be from reasonably near home to reasonably near school and in fact the maximum distance a child would be expected to walk would be about one mile. To achieve even this buses in some rural areas have to deviate quite a lot from the most direct route.

Returning to the subject of encouraging a change of mode from car to bus, John Barrow of London Transport said he saw little prospect of such a change. He was interested in whether increasing the relative cost of car travel by, for example, road-pricing, would effect the school journey and he wanted to know whether any work had been carried out on this subject.

Peter Jones replied that there was anecdotal evidence based on public attitudes to road pricing in London, that shorter journeys (such as the school journey) are often the ones for which families are most dependent on the car, as in London, such journeys are often from suburb to suburb and therefore very difficult to make by public transport.

John Barrow then gave two examples of the practical problems associated with the organisation of school transport. The first was that of a school in the London Borough of Barnet. A minibus route passes the school and for the past three years there has been chaos every September as dozens of children try to get on to a very small bus.

The second example was of a school in Inner North London. A new bus route was introduced and is now very busy. It is not known what mode the pupils used previously but this could be an indication that public transport will be used if it is made more available. However, it is very hard for operators to plan ahead as the situation changes every September when pupils change schools.

#### Further Reading:

Schools Transport - the comprehensive guide by Sian Thornthwaite. Price £14.50 (+ £1.50 p&p) from TAS, Britannic House, 1<sup>A</sup> Chapel Street, Preston, Lancs PR1 8BU

**ARTICLE****RAILWAY INVESTMENT AND PRIVATISATION**

Nigel G Harris, Business Planning, London Underground Ltd.

**Introduction**

As Britain's railways begin their transition into the private sector, a number of the consequences of privatisation remain unclear. Of these, that regarding investment is critical, as it will shape the future of the industry. This paper highlights a potential problem which will need to be overcome if the railways are to succeed.

**The Effects of Privatisation**

The key test of whether or not railway privatisation is a success or not is the effect on railway demand. Will traffic go up or down? Can the alleged greater efficiency of the private sector overcome the increased bureaucracy of a larger number of organisations involved in the rail industry and actually deliver a better service?

In fact, the efficiency argument is thought by many in the industry to be of limited importance. It appears unlikely that significant improvements in efficiency will be widely available from a base case in which assets are very heavily used. The extent to which network benefits such as through ticketing and good information remain is, however, likely to be important; the lack of these has been widely cited as reasons contributing to the decline in bus patronage following the 1985 deregulation of stage bus services in Britain. Perhaps even more important in its possible impact on passengers is the increased accessibility of finance to a rail system that has been under-funded for decades by governments of all political persuasions when national expenditure has been squeezed.

**The Current Investment Climate**

At present, British Rail investment is not only subject to an 8% real financial rate of return (except for some schemes in urban areas such as London where cost:benefit analysis is applied), but is also subject to an

External Financing Limit which places a ceiling on the total amount that BR may borrow. Treasury rules prevent BR from borrowing on the open market, on the grounds that the Government can offer the best rates for borrowing; unfortunately, this argument is weak if the Government (for macro-economic reasons) does not have the money available. Supporting arguments for the status quo relate the value of capital expenditure in the rail sector to that elsewhere in the economy, stating that the Government might realistically wish to keep some sort of balance between investments.

Unfortunately, the results of the above policies have been those seen widely throughout the public sector. Under-investment has led to a poor image, poor staff morale (and often poor staff relations) and an unreliable and (in BR's case) expensive service. Projects with rates of return greater than 8% have, on a number of occasions, been deferred; projects such as level crossing replacements have not always been delivered and have not therefore produced the operating cost savings that justified them. Subsidies in subsequent years have therefore been spent on higher operating costs rather than on developing and improving the service to passengers with increasing quality expectations.

**Possibilities with the Private Sector**

The private sector, however, has access to a greater range of sources of finance. Not only can private companies use cash in hand from retained profits, but they can raise money from share or debenture issues, or borrow on the open market through bond issues. The markets have already provided as much as £10bn for Eurotunnel alone, so they are clearly large enough to support any reasonable requirements for a railway industry which will still be receiving some Government money in respect of subsidies for the "social railway".

What happens in practice, however, may be different, primarily since the railways are being broken up as well as privatised. To illustrate the potential problems, two investment case-studies are set out below. In the first case, all participants in a scheme benefit from a proposed railway development, but only by a small margin. The second case sets out an example where one operator loses out by a small amount whilst another gains by a much larger amount.

**Example 1: All Participants Benefit**

It is quite easy to conceive of a small project in which a unified railway

operation might find it worthwhile to invest to the mutual benefit of its various parts - improving interchange between two passenger services is one such possibility. Although the absolute returns to each of the services involved are small, the administrative overheads involved in the investment are minimised in a unified railway, and a return might be forthcoming. This is the current situation, except that a lack of funding sometimes prevents the investment.

However, if a number of organisations are involved, then some cross-charging between the participants is required, typically from the infrastructure authority to the train operator(s). The difficulty is in determining a suitable level of charge which repays the investor (including profit margin) whilst still making it worthwhile for the other participant(s). The addition of the cross charged profit margin, together with the greater administrative burden imposed through the involvement of several participants, is likely to make conditions much less favourable for such investment. Indeed, the smaller and disaggregated returns may prevent investment at all through lack of management time and interest. Investments may therefore be unlikely to be promoted by any of the parties involved, even if they are worthwhile in sum.

We may describe this problem as a "NETWORK INVESTMENT" problem. Expressed generally, provided that costs and benefits do not fall evenly between the different parties involved (which is inevitably going to be the case), the rates of returns of projects will vary between the participating operators. For a project to go ahead, it must pass the financing thresholds for all operators or, critically, for the operator with the lowest return. If any operator has insufficient financial resources, the project will not proceed. This assumes that all the parties involved have a degree of goodwill or political interest in the project; in any case, there are organisational difficulties in involving a greater number of companies.

There are also worries about the loss of a network perspective from individual operators who do not have the full information that a national railway administration might have; there may be wider benefits which accrue outside the immediate area of interest. These might include the synergistic benefits of developing markets for traffics which have different peak attributes, and which can therefore be served profitably.

The reasons for the network investment problem are therefore three-fold:

- (i) costs and benefits do not fall evenly;
- (ii) the body making the investment (perhaps the infrastructure authority) needs a return on the project; this return manifests itself as an additional charge to the operators, so the effective cost of the project rises;
- (iii) project costs rise as the number of participants rise.

Should anyone doubt the relevance of these issues, then it should be observed that current problems already occur between BR profit centres and/or LUL lines, but are usually resolved by senior management acting in the interest of the rail business as a whole. However, it should be noted that it is fragmentation of the industry, not its privatisation, which causes the problem to become critical.

#### **Example 2. Winners and Losers**

It is also easy to conceive of possible investments in which one party is a net loser whilst another is a net winner. One operator may incur additional costs whilst the bulk of the revenue generated falls to another operator. Whilst the two remain under a unified management, the project may still go ahead as long as the scheme has a positive overall effect.

In fact, even if the services are separately operated, the scheme may still proceed - but only if one operator compensates the other for the increased costs and/or reduced revenue. The scheme criterion is therefore whether the net change in revenue exceeds the required rate of return for the investing operator, which is broadly the same as with a unified management. The only difference might be an allowance (maybe non-trivial) for administration of some suitable revenue proportioning mechanism, but the project remains no different in essence from that in the overall management case. Perhaps surprisingly, then, this scenario potentially presents fewer problems than that in which all win, but only by a small amount.

#### **Overall Conclusions**

In conclusion, therefore, we can see that, whilst private sector operators are likely to find money easier to borrow, investment may be harder to agree. This appears particularly probable where the net benefits are small for a number of different participants, none of whom will have the incentive to progress projects, and who may lack information in the first place. If the

benefits are sufficiently large, however, then projects seem likely to be carried through, even if "losers" have to be compensated by "winners". The challenge for the participants in the new railway structure is to maintain and expand both types of investment notwithstanding the disaggregation of responsibilities.

## TEG NEWS

### **Annual General Meeting**

The Annual General Meeting of the *Transport Economists' Group* was held on 16th March 1994 at the University of Westminster. The meeting received and agreed the Chairman's Annual Report and the Treasurer's Report and Accounts. The reports and the Committee elected by the Meeting are given below:

### Chairman's Annual Report for 1993

The year saw another successful series of monthly meetings in London, and a well-attended one day seminar.

Meetings were held on the themes of : the Economic Evaluation of transport safety (Prof Andrew Evans of London University, January); Road Pricing policy issues (Prof Peter Jones, University of Westminster, February); the London Transport 'Countdown' system on bus route 18 (Stephen Balogh of London Transport, March); the Allocation of monetary evaluation techniques to environmental effects of transport (Keith Hargest, Rendell Planning, April); London as a World City (Keith Gardner of the London Planning Advisory Committee, May); Motorway widening issues (Richard Cuthbert of W.S.Atkins, June); Privately-owned toll roads in Sydney (Prof Gordon Mills of the University of Sydney, September); Bus Deregulation : reverting to the London model (myself, October); Transport in Eastern Europe (Roger McGlynn of W. S. Atkins (November); and School transport and congestion (independent consultant Sian Thornthwaite, December).

The fourth one-day seminar, on rail privatisation, was held on 24 February 1993. As usual, we were able to select a highly topical subject. An extensive report of the lectures given by Graham Hewitt (Network South East), John Dodgson (Liverpool University), David Starkie (Putnam Hayes & Bartlett), Paul Amos (Travers Morgan), Dick Dunmore (Coopers & Lybrand) and Roger Ford (Modern Railways) was published in the Summer 1993 issue. Considerable uncertainty as to the likely track charges emerged as a major issue and, indeed, Railtrack has announced exact figures for 1993/4 only within the last two weeks (this issue will also be the subject of a talk by Philip O'Donnell of Railtrack at our May meeting this year).

Composition of the committee remained unchanged, following elections at the Annual General Meeting on 17 March 1993.

Thanks to all committee members for their work during the year, especially Don Box as Treasurer & Membership Secretary (notionally 'retired' as a rail economist, but in practice strongly in demand in Pakistan, Bulgaria, Russia and elsewhere), Laurie Baker as journal editor, and Ian Gilliver as meetings organiser.

I regret to record the death of our member Roger Steadman, of British Rail, in September 1993.

Due to pressure of time, it has yet not been possible to organise a fifth one-day seminar since that in February 1993, but a seminar on the theme on private investment in public infrastructure in transport is now being organised for the Autumn.

Peter White, Chairman  
16 March 1994

#### Membership Secretary's Address

The Membership Renewal Notice for 1994 inadvertently recorded my address as '43 Silverdale Road'. Would members please note that I am still resident at 73 Silverdale Road and address subscriptions and other correspondence to that address as before.

Don Box  
Treasurer & Membership Secretary

#### Report of the Treasurer & Membership Secretary for 1993

I am pleased to be able to once again report a successful financial outcome to the year's activities. The substantial surplus of £664 is almost a repeat of the 1992 result and is, again, due to buoyant membership and a well-attended seminar. The surplus represents 18.5% of income from all sources, compared with 22% in 1992.

The breakdown of expenditure between the main items and compared with the two previous years is:

	1993	1992	1991
	£	£	£
Administration	737	644	606
Publications	930	888	1174
Meetings	707	512	280
Seminar	499	315	487

The large increase in expenditure on meetings is almost entirely due to the very substantial increase in charges for room hire which have become commonplace everywhere in recent years. Short of reducing the number of meetings there is little your Committee can do to reduce expenditure here.

Apportioning the surplus for the year between the seminar and other activities could be misleading as, of course, some items of expenditure are 'joint' to all activities. But by adopting an incremental approach to the costs and revenues of the Group it can be said that in 1993 a small surplus of a little over £100 would have been made in the absence of the seminar.

The formal accounts and balance sheet have been made available to members at the Annual General Meeting and appear on the following page.

Subscription rates are being held at £15 for the year 1994.

At 31 December there were 163 members fully paid-up for 1993. This is an increase of 25 over the corresponding figure for the end of 1992. This significant improvement in membership was due to an unprecedented increase in recruitment and a very low level of lapsed membership (4) during the year.

S.D. Box, Treasurer & Membership Secretary

**Income & Expenditure Accounts for 1993**

<u>Income</u>	£	£
Subscriptions - 1993	2460	
Seminar	1055	
Interest	17	
Other	<u>52</u>	<u>3584</u>
 <u>Expenditure</u>		
Administration - Secretary	612	
- Other	<u>125</u>	737
Publications		640
Meetings - Room hire	400	
- Entertainment/Expenses	207	
- Insurance	<u>100</u>	707
Seminar		499
Bank Charges		<u>47</u>
		<u>2630</u>
 <u>Excess of income over expenditure for the year</u>		954
Less: Provision for No.3 Journal 1993		290
NET		<u>664</u>

**Balance Sheet**

Accumulated funds at 31-12-92	1562	
Plus: Excess of income over expenditure	<u>664</u>	2226
Creditors		88
Provision for No.3 Journal 1993		<u>290</u>
		<u>2604</u>

## Represented by:

Deposit Account	851	
Current Account	<u>1753</u>	<u>2604</u>

Note: Following discussion with the Inland Revenue no provision is now being made for Corporation Tax on interest. Consequently, the accumulated funds brought forward at 1-1-93 have been restated to include previous provisions.

**Report of the Auditor**

To members of the Transport Economists Group:

I have examined the books and records of the Transport Economists Group and have received explanations from your Treasurer as necessary. In my opinion the Balance Sheet gives a true and fair view of affairs as at 31 December 1993 and the Income & Expenditure Account properly reflects the excess of income over expenditure for the year then ended.

J.C. Bentley, FCCA, 24 Phillimore Road, Emmer Green, Reading.

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