10 Fares

Responsibility for setting fares

- 10.1. Section 8 of the LRT Act requires LRT to exercise control over the general level of fares and services. In practice LRT sets fares for LUL services. There is no statutory control of the fares charged by LRT, although in setting the financial objectives and agreeing the EFL, the Secretary of State may give some guidance as to fares levels or structure.
- 10.2. Whilst it was controlled by the GLC, LTE was directed to set its fares so as to maximise passenger mileage within overall financial constraints. Fares and service levels were adjusted to encourage the maximum demand that could be achieved within a predetermined level of financial support. It was claimed that this policy was not only simple for management to understand but also ought to lead to the maximisation of passenger and social benefits for the particular grant level set by the GLC. This policy has never been replaced by an alternative statement of fares policy although the formal direction lapsed when LRT was formed in 1984. LRT has, however, indicated that since it ceased to be under the control of the GLC it has stopped basing its fares policy on passenger miles maximisation.
- 10.3. Initially, when LRT was established in 1984, the then Secretary of State for Transport laid down a direction that fares should be kept broadly in line with prices generally. Subsequently LRT decided, following guidance from the Secretary of State, that it should increase its fares in real terms over a period of years as it developed and improved its services. The objective was that passengers should pay for the day-to-day operation of services and fund a growing amount of the capital programme although it was recognised that the costs of the major expansions to the rail system would have to be met substantially by grant.
- 10.4. In CLRS published in January 1989 it was assumed that fares would increase in real terms by about 2.5 per cent per annum cumulatively until the beginning of the next century. In the foreword to this document the then Secretary of State for Transport indicated that he agreed with the principle that passengers and other beneficiaries should pay a higher proportion of the cost of providing services and this was the reason for this assumption.
- 10.5. The LRT Chairman's Planning Statement published in December 1989 stated that fares would be increased by about 3 per cent in real terms in February 1990. LRT had wanted to increase real fares in January 1990 by rather more than this but had been requested by DTp to moderate the increase. The late date at which this request was received meant that LRT had to revise its planned January fares increase and had to delay its fares increase by a month. LRT has told us that it would have liked a further significant increase in real fares in January 1991. However, it was requested by the Secretary of State to keep its cash increase to below double figures and not to alter individual fares by significantly more than this.

LUL's fares structure

10.6. Until October 1981 LUL, in common with the rest of LRT and with BR, operated a system of ticketing based principally on the sale of point-to-point tickets, either single journey or period season tickets, with charging on a scale graduated by distance. Reduced fares were offered for off-peak day returns and a discount applied to the pre-purchase of travel through season tickets. Through booking to/from some BR stations was possible with fares being `summated', but LUL tickets were not generally valid on buses. During much of the 1970s bus and Underground fares scales were different.

- 10.7. In the late 1970s steps were taken to equalise bus and Underground fares and to develop a simpler ticketing system which would facilitate the pre-purchase of travel by passengers in the form of season or similar tickets. This initiative was driven particularly by the need to reduce the time taken by fares transactions on driver-only buses, so as to speed up this form of operation and permit its extension. Integration of fares and inter-modal ticketing was also seen as a first step in better planning of integrated public transport services.
- 10.8. In October 1981 the newly elected Labour GLC introduced its 'Fares Fair' package. LUL's fares were reduced by an average of 31 per cent. At the same time the opportunity was taken to introduce a major simplification of the London Buses and LUL fares structures. The main feature of the restructuring was to create two charging zones in the central area (City and West End) within which flat fares applied. This represented the first application of zonal fares to LUL.
- 10.9. The low fares introduced in October 1981 as part of the Fares Fair package proved relatively short lived. Legal action initiated by the London Borough of Bromley led to a decision by the Law Lords that the fares reduction as proposed and implemented was illegal. As a consequence of this decision, fares were nearly doubled in March 1982. The two central area charging zones were, however, retained and the opportunity was taken to restructure the Underground graduated fares scale to intervals of three miles. This had the effect of introducing a *de facto* inner rail zone, with equalisation of radial bus and rail fares for journeys from the Inner Area to a single Central Zone.
- 10.10. Following a High Court Action between LRT and the GLC to establish the legality of reducing fares to broadly the level that existed prior to the Fares Fair scheme, it was decided that fares should be reduced by on average 27 per cent in May 1983. At the same time the vast majority of LUL stations were brought into a zonal fares scheme by creating five zones, namely:
 - Zone 1 A central zone comprising approximately the area within the Circle Line, with certain additions.
 - Zone 2 An inner zone approximately 3 miles wide around the central zone.
 - Zones 3, 4 and 5 Outer zones covering the rest of Greater London and together forming a suburban ring varying in width from about 9 to 12 miles.
- 10.11. Season tickets and many bus passes were replaced by Travelcards, which were valid on both LUL and London Buses within the zones purchased, offering to regular passengers for the first time intermodal travel with one ticket. Both ordinary fares and Travelcards were assessed on the zonal structure. Charges varied according to the number of zones through which travel was made, with no further charge for re-entry to the same zone. Special charging arrangements applied for short-distance cross-boundary journeys, where the full two-zone fare would have been unreasonably high.
- 10.12. In 1984 a one-day Travelcard was added as an off-peak ticket initially as an alternative to cheap day returns, though the latter have gradually been withdrawn as the scope of the off-peak Travelcard has been increased. The one-day Travelcard is only available after 9.30 am. It can be used in the evening peak period.
- 10.13. From January 1985 a further period ticket was introduced giving availability within zones on NSE services as well as LRT services. These tickets, sold under the brand name of 'Capitalcard', were initially priced 10 to 15 per cent higher than the Travelcard to reflect their wider availability. A one-day version of the Capitalcard was added in June 1986. Capitalcards were also available from BR stations outside the Zone 5 boundary. These offered travel by BR from the selected station to the Zone 5 boundary with onward travel by BR or LRT services including bus, Underground and DLR inside the Zone 5 boundary. These services were competitively priced at a small add-on to the fare from the BR station to its Central London terminal or termini and proved very popular with commuters who wished to use LRT services for onward distribution from the BR terminal.

10.14. In January 1989 the Travelcard and Capitalcard were merged under the common brand name of Travelcard.

10.15. The outer boundary of Zone 5 reflected the old GLC area. The zone extended considerably further from Central London in some directions than others. This was of particular concern to NSE as it meant that fares on some of its radial routes from points at or just outside the Zone 5 boundary had to be held down below their normal level related to mileage from the Central London terminal because of the need to relate fares to the standard all-zones Travelcard. In the January 1991 fares increase the opportunity was taken to split Zone 5 into two zones, thereby creating a Zone 6. Fares from stations in Zone 6 to other zones were increased by slightly more than fares from Zone 5. The current fares structure is summarised in Table 10.1.

10.16. LRT considers that the zonal fares structure and associated Travelcards have been found to offer important benefits compared with the traditional graduated scales related to distance. It has pointed out that:

- (a) the integrated approach encourages passengers to use railway services for the main radial movements, and to use buses for feeder and distribution journeys and for local trips in the suburbs, leading to a cost-effective use of resources;
- (b) Travelcards generate both additional travel (mostly off-peak) and extra revenue, as passengers increasingly recognise the convenience and value of the tickets;
- (c) the scope for fraudulent travel is reduced as opportunities to 'override' are reduced and ticket checking can be concentrated in relation to zonal boundaries; and
- (d) the ticket-issuing task is reduced and this has allowed OPO on buses through faster boarding speeds.

Fares levels, patronage and revenue

10.17. As the previous section has described, both the structure and the level of fares on LUL have varied considerably and at times rapidly in the last ten years. This has affected LUL's patronage and revenue. Figure 10.1 shows the movement in the real fares index (calculated on a compound basis at each fares increase), passenger miles, the real revenue per passenger mile and the real traffic receipts over the period 1971 to 1990. It can be seen that:

- (a) Over the period 1971 to 1980 real fares and real revenue per passenger mile both increased by about 50 per cent. Total real income increased by only 23 per cent because of an 18 per cent reduction in traffic carried.
- (b) The real fares index peaked in 1982 at a level 63 per cent higher than 1971, fell to a low only 21 per cent higher than 1971 in 1984/85, and has since risen to a level 40 per cent higher than in 1971.
- (c) Since 1980 real income per passenger mile has fallen much more than real fares. This in part reflects the introduction of the Travelcard, which has generated additional traffic, and in part reflects a growth in longer-distance travel, which is charged at a lower rate per mile. Over the period from 1980 to 1990/91 the real income per passenger mile has fallen by 24 per cent although real fares calculated on the basis of annual compound fares increases have only fallen by 7 per cent.
- (d) Total real revenue has increased by 13 per cent over the period from 1980 to 1990/91. This is a slower rate of increase than in the previous ten years, when real fares increased by 50 per cent. In 1990/91 real fares were 7 per cent below their 1980 level.

TABLE 10.1 Specimen fares as at May 1991

	Average distance*		Cheap day return- one-day			Weekly	Monthly	Annual
	(miles)	Single	Return	Travelcard	LT Card	Travelcard	Travelcard	Annual Travelcard
To or via Zone 1								
Zone 1 to Zone 1†	-	0.80	1.60	-	-	7.80	30.00	312.00
Zone 2 to Zone 1‡	3.5	1.10	2.20	2.30	3.50	10.00	38.40	400.00
Zone 3 to Zone 1§	6	1.40	2.80	2.70	4.50	13.80	53.00	552.00
Zone 4 to Zone 1¶	8.5	1.80	3.60	2.70	4.50	17.20	66.10	688.00
Zone 5 to Zone 1¤	11	2.20	4.40	3.10	5.50	21.60	83.00	864.00
Zone 6 to Zone 1**	13.5	2.30	4.60	3.10	5.50	22.00	84.50	880.00
Zone 2 to Zone 2 (via Zone 1)	-	1.10	2.20	2.30	3.50	10.00	38.40	400.00
Outside Zone 1								
Zone 2 to Zone 2 (one zone)	-	0.50	1.00	-	-	4.60	17.70	184.00
Zone 3 to Zone 2 (two zones)	-	0.80	1.60	-	-	7.80	30.00	312.00
Zone 4 to Zone 2 (three zones)	-	1.20	2.40	2.60	-	11.70	45.00	468.00
Zone 5 to Zone 2 (four zones)	-	1.50	3.00	2.60	-	14.30	55.00	572.00
Zone 6 to Zone 2 (five zones)	-	1.60	3.20	-	-	14.60	56.10	584.00
Zone 6 to Zone 3 (four zones)	-	1.30	2.60	-	-	12.00	46.10	480.00
Zone 6 to Zone 4 (three zones)	-	0.90	1.80	-	-	8.20	31.50	328.00
Zone 6 to Zone 5 (two zones)	-	0.60	1.20	-	-	4.80	18.50	192.00
Zone 6 to Zone 6 (one zone)	-	0.50	1.00	-	-	4.60	17.70	184.00

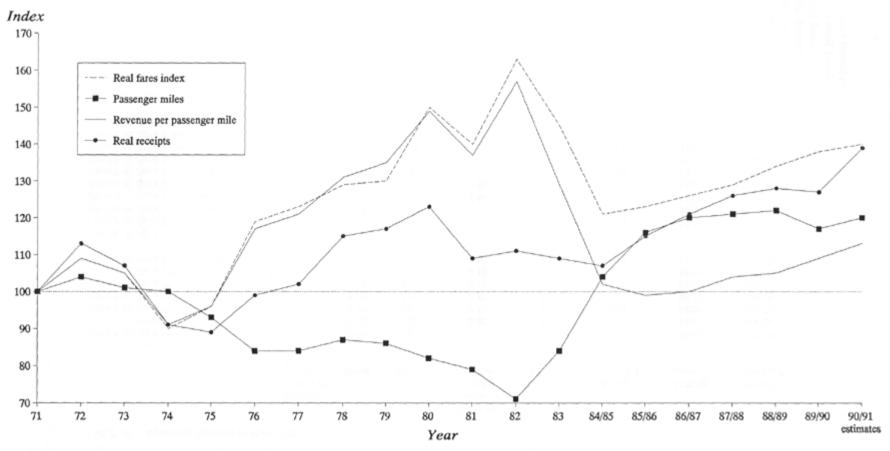
Source: LUL.

^{*}The average distance is measured from Piccadilly Circus.
†Zone 1 extends up to 2.75 miles from Piccadilly Circus.
‡Zone 2 extends from 2 miles to 5 miles from Piccadilly Circus.
§Zone 3 extends from 4 miles to 7.75 miles from Piccadilly Circus.
¶Zone 4 extends from 6.75 miles to 10 miles from Piccadilly Circus.
¤Zone 5 extends from 9.75 miles to 12.75 miles from Piccadilly Circus.

^{**}Zone 6 extends from 12 miles to 16 miles from Piccadilly Circus.

FIGURE 10.1

LUL real fares, demand and revenue, 1971 to 1990/91



Source: LUL.

More details of the movement in passenger mileage and real fares on a year by year basis are shown in Table 10.2. Passenger mileage which fell by 18 per cent over the period from 1970 to 1980 increased by some 50 per cent over the period from 1980 to 1988/89 but has since fallen back slightly.

TABLE 10.2 Changes in passenger mileage and real fares, 1971 to 1990/91

	Passenger miles	Real fares index	Passenger miles index	Percentage change on previous year Real fares Passenger mileage		
Year	(million)	1971=100	1971=100	rical faics	r asseriger mileage	
1971	3,205	100	100	-	-	
1972	3,321	109	104	+9	+4	
1973	3,246	105	101	-4	-3	
1974	3,210	90	100	-14	-1	
1975	2,967	96	93	+7	-7	
1976	2,706	119	84	+24	-10	
1977	2,699	123	84	+3	-	
1978	2,800	129	87	+5	+4	
1979	2,770	130	86	+1	-1	
1980	2,640	150	82	+15	-5	
1981	2,540	140	79	-7	-4	
1982	2,270	163	71	+16	-10	
1983	2,700	145	84	-11	+18	
1984/85	3,340	121	104	-17	+24	
1985/86	3,710	123	116	+2	+12	
1986/87	3,862	126	120	+2	+3	
1987/88	3,888	129	121	+2	+1	
1988/89	3,910	134	122	+4	+1	
1989/90	3,738	138	117	+3	-4	
1990/91 (estimated)	3,833	140	120	+1	+3	

Source: MMC based on LUL data.

Concessionary fares

- 10.18. Three major concessions for certain categories of users are available from LUL. These are:
- (a) child rates;
- (b) free travel for the elderly and disabled; and
- (c) scholars' term tickets.

10.19. Child rates are available to children aged between five and 15 years inclusively, across the range of tickets offered. Children under five years of age travel free. The percentage reduction for children varies from 40 to 60 per cent for ordinary tickets and from 35 to 75 per cent for Travelcard. These substantial reductions have remained from the time when the GLC's policy was to set very low fares for children. LRT now wishes to reduce progressively the level of discounts offered to children.

10.20. LRT and the London boroughs operate a scheme under sections 50 to 53 of the LRT Act whereby travel passes are issued free by the boroughs to their elderly, blind and handicapped residents. Payment is made by the boroughs to LRT on the basis of an annual negotiation, reflecting estimated use made of such passes, current fares levels and travel generated by their availability. LRT considers this system generally works well, to the satisfaction of all parties concerned.

10.21. Certain scholars also benefit from free travel on specific LRT/LUL services for which full payment is received from the local education authorities.

The method of determining the level and structure of fares

- 10.22. We are required by our terms of reference to investigate and report on the method of determining the level and structure of fares and the relationship of fares both to cost structures and to the level of peak and off-peak demand on the network.
- 10.23. Section 8 of the LRT Act states that 'It shall be the duty of LRT to exercise their control over any subsidiaries so as to determine the general level and structure of the fares to be charged for public passenger transport services provided by LRT or any subsidiary of theirs'. This duty has to be set in the context of the general duties set down in section 2 of the LRT Act including:
 - (a) the requirement to co-operate with BR; and
 - (b) the financial duty in section 15 of the LRT Act and its duty to conduct its affairs with a view to achieving any financial objectives determined for it by the Secretary of State under section 16.

LRT's current principal strategy for fares as set out in the Chairman's Planning Statement of December 1989 is to:

Increase fares over the next few years as the quality of service improves and Londoners' incomes grow. This will mean that passengers pay for the day to day operation of services and fund a growing amount of the costs of the capital programme. However, LRT believes the cost of expanding the rail system as proposed in the Central and East London Rail Studies will have to be met substantially by grant even after developer contributions have been taken into account.

- 10.24. In the Chairman's Planning Statement it is also stated that it is LRT's strategy to `develop fare collection systems so that fares can be targeted and differentiated with accuracy and equity between modes and by times of day'.
- 10.25. LRT normally raises fares once a year, usually in early January. NSE fares are raised on the same date. The revised fares are worked out during the course of the preceding year.
- 10.26. Whilst the ultimate responsibility for determining future fares levels rests with LRT, the subsidiary operating companies including LUL make suggestions and are involved in the process of preparing recommendations on fares for the LRT Board's consideration. For this purpose LRT has established a Fares Revenue Committee chaired by the LRT Director of Planning which includes representatives from LUL's finance and marketing functions who clear points of principle with the LUL Board. This committee meets approximately monthly and considers both the details of the next fares increase and also longer-term issues related to ticketing procedures and fares strategy. During the course of the year proposals for the next fares rise are considered. Informal discussions are also held with DTp as to the level of fares rise that the Secretary of State would be likely to permit for the coming year. The recommendations of the committee are then presented to the LRT Board for final consideration and approval.
- 10.27. In its 1990 Business Plan LUL stated that it was its objective to set fares levels which would reduce peak crowding and achieve profitability. It pointed out that the 1988 Strategic Plan envisaged real increases of 15 per cent in its first two years. This would have been sufficient to generate an operating profit in 1989/90. In the 1989 Business Plan these figures were no longer regarded as realistic and 5 per cent real growth was assumed, generating an operating profit in 1993/94. In the 1990 Business Plan it was assumed that real prices would increase by 3 per cent per annum, in line with the increase implemented in February 1990. At this rate of increase LUL was forecast to continue to make an operating loss in all years of the plan, through to 1995/96, with the loss falling, however, over the period 1990/91 to 1995/96, from an estimated £136 million to £4 million.
- 10.28. In fact in 1991, at the request of the Secretary of State, real fares were held below 10 per cent close to the prevailing level of inflation although the anticipated level of inflation during the course of the year may be lower than the observed inflation in the previous year.

10.29. The 1990 Business Plan states that LUL is already seeking to maximise revenue within the fares rises indicated. The whole area of revenue collection is one which will attract increasing attention in future years, as new technologies such as Touch and Pass and Stored Value Ticketing (SVT) are examined. Better means of targeting fares will be necessary both to maximise income and to achieve the right balance between peak and off-peak fares.

10.30. LUL states that its short- to medium-term marketing strategy seeks to influence demand to match the availability of capacity on the network. A combination of pricing, new fares products, advertising and local initiatives will be used to improve the balance between demand and supply. With this in mind the increase in fares from February 1990 was weighted towards journeys into and within the heavily congested Central Zone.

10.31. Future pricing policy in the short term will be based on matching supply to demand. For example, consideration is being given to differential peak/off-peak pricing for certain single tickets and return journeys. Restrictions on travel in the evening peak are being considered for one-day Travelcards to the central area; this might be matched by the introduction of a new all-day Travelcard which would be valid in both the morning and evening peaks. All lines will be looking for local marketing opportunities, especially to promote off-peak travel. For the longer term, SVT is being studied to see what benefits this may have.

Fraud

10.32. As part of the policy of maximising revenue within a given level of fares rises, LUL is determined to reduce fraud. It has taken the following steps to this end:

- (a) the final stage of implementation of the existing UTS gates, so that all customers will have to pass through the gates on entry and exit within Zone 1;
- (b) improved ticket checking at station barriers outside Zone 1;
- (c) the introduction of a Revenue Protection Manager on each line, with line-based revenue protection teams carrying out ticket inspections on trains and stations; and
- (d) the use of line-based fraud surveys to monitor fraud levels and set targets for reduction.

LUL told us that it believes that by these means it has reduced fraud from roughly £35 million per annum to around £15 million per annum.

10.33. LUL has employed consultants to consider the possibility of extending UTS gates throughout the network as a means of reducing fraud. The consultants concluded that full gating of the Underground might be justified financially to reduce fraud but that the case was not strong, as fraud levels had already been significantly reduced.

The relationship of fares to costs

10.34. LUL does not consider it appropriate to carry out routine analysis of costs by route, section of route or time of day. It is therefore difficult to relate the fares charged for particular journeys to the costs of those journeys. At a late stage in our inquiry LUL did provide us with the results of some work carried out in 1984. This suggested that the cost of providing an extra train mile in the peak was three times the cost of doing so in the off-peak. This work assumed that the capital costs of rolling stock were all incurred in the peak, and that no allowance was made for either the capital or the maintenance costs of providing the basic track and signalling infrastructure.

10.35. We have been told by LUL that it considers it desirable to have a fares structure which reflects:

- (a) the cost incurred by different kinds of passenger trip (which is dependent on the length, location, timing etc); and
- (b) the strength of demand in the various submarkets (work, leisure, etc).

LUL claims that, in practice, both the cost- and market-based approaches to pricing often lead to similar conclusions. Thus in recent years, whilst fares have been market-led, policy has aimed to increase peak fares relative to the off-peak and to increase radial and Central London fares relative to suburban fares.

- 10.36. As a result the changes in fares have taken account of the inherently higher cost of the central area, which arises from such factors as:
 - (a) the predominance of deep-level and subsurface structures and the consequent need for lifts and escalators;
 - (b) station capacity constraints and moving machinery requiring a substantial staff presence for safety; and
 - (c) the significant track mileage in single-bore tube tunnels which restricts much maintenance and renewal to outside the traffic day.

These factors are reflected in the zonal pricing scale, with higher fares charged in to and from Zone 1.

- 10.37. LUL has also stated that journey costs are significantly determined by station use and hence a strictly distance-proportionate scale would not be appropriate. Station costs in the outer zones are generally lower than those of Zone 1, and prices to/from the centre reflect these factors.
- 10.38. We have also been told that, whilst time-of-day costing is not routinely undertaken, desk analysis suggests that congestion is the significant variant on short-run marginal costs and capacity that on long-run marginal costs. This leads to the conclusion that costs are higher in the peak in the central area where congestion and capacity constraints apply, and this conclusion underpins both LUL's policy of discounting off-peak travel and its moves to establish peak travel in Zone 1 as a premium product.
- 10.39. Whilst there can be little doubt that the costs of operation per train mile are higher in the central area than in the suburbs, and in the peak than in the off-peak period, LUL has not been able to provide any recent quantitative estimate of the extent of this difference. In particular, it has not been able to demonstrate whether:
 - (a) after allowing for the difference in average loading per train and frequency of service operated, unit costs per passenger are actually higher in the peak than the off-peak or in the central area compared with suburban areas; and
 - (b) the average fare paid per passenger mile is markedly higher or lower in the central area as compared with suburban areas and in the peak as compared with the off-peak.
- 10.40. We also discussed with LUL whether the present zonal fares system enabled it to set prices which reflected the costs of individual journeys. LUL told us that in the design of the six-zone system it was balancing simplicity, which made for operational ease and passenger convenience, against more complicated structures which attempted to match the market more finely.

The relationship of fares to the level of peak and off-peak demand on the network

10.41. It is LUL's strategy to set fares levels which will reduce peak crowding. This objective can of itself be used to justify LUL's policy of charging higher fares in the peak period even if the claimed higher costs of providing a service in the peak period cannot be proven.

- 10.42. LUL has also pointed out to us that the elasticity of demand for peak travel is usually considerably lower than for off-peak travel so that an increase in peak fares generates proportionately more revenue than a similar percentage increase in off-peak fares. This means that so long as LUL is trying to maximise the net revenue yield of a given average level of fares increase then it is sensible to raise peak fares by a higher percentage than off-peak fares.
- 10.43. However, a number of third parties commented that for LUL to raise peak fares was highly undesirable. They pointed out that:
 - (a) many of those travelling at peak periods were dependent on LUL for essential journeys to work;
 - (b) the quality of service offered in the peak period was much lower than the rest of the day and it was unfair to charge people more for travelling in the worst conditions; and
 - (c) charging people more to travel by Underground in the peak period would cause an undesirable switch from public to private transport.
- 10.44. In order to encourage off-peak travel LUL offers one-day Travelcards at a substantial discount. These are not available until after 9.30 am. LUL does not consider that the effect of the promotion of the one-day Travelcard on the evening peak is at present a problem. In the past the main concern has been the morning rush-hour where demand has been more peaked. The Travelcards are, however, valid throughout the evening peak and demand at the evening and morning peaks is now very similar. We understand that consideration was given to restricting the use of one-day Travelcards in the evening peak but that this was rejected on the grounds that it could be difficult to implement and might cause problems if passengers were rushing to use the system before the evening peak commenced.
- 10.45. Period Travelcards are available for a minimum of seven days or more and effectively permit Travelcard holders, once they have purchased a ticket, to travel when they like, including during both peak periods, at zero marginal cost. A weekly Travelcard from Zone 6 is currently charged at 9.6 times the daily rate for a single ticket from that zone to Zone 1. There is a considerable body of opinion within LUL that period Travelcards are at present significantly underpriced in relation to standard single journey tickets. LRT's ability to raise the price of Travelcards relative to single journey tickets has, however, been constrained in the last two years by the reluctance of the Secretary of State to permit LRT to raise individual fares by significantly more than the rate of inflation.

Allocation of Travelcard revenue

10.46. The revenue from Travelcard is divided between the participating operators in proportion to the passenger mileage on each mode. In the case of Travelcards issued from BR stations outside Zone 6 the mileage relates to all mileage inside Zone 6, and the revenue is the price of a normal Zone 6 Travelcard. LUL is unhappy that this formula does not fairly reimburse it for the high costs of the relatively short journeys carried out by combined Travelcard/BR point-to-point tickets sold to commuters living outside London. It has also pointed out that BR often charges significantly more for these outside Zone 6 Travelcards compared with a normal season ticket to Central London than it passes on to LRT as LRT's share of the Travelcard revenue. In other words BR is making a profit from the surplus it charges its passengers to buy a Travelcard for journeys very largely made using LRT and, in particular, LUL services.

10.47. BR does not deny this. It has, however, pointed out that in its current financial position it cannot afford to lose revenue. The rates initially set by LRT for the Travelcard were significantly lower than BR would normally expect to charge using its mileage-based tariff for equivalent period season tickets to its Central London rail termini. It has therefore had to hold back its season ticket rates so as to make them comparable with Travelcard. As a result it has lost significantly more revenue than it has been able to recoup from the add-on it charges combined Travelcard/BR point-to-point ticket holders from outside Zone 6. It considers that the solution to this problem is to raise the price of Travelcards to a level that more closely reflects the costs of catering for Travelcard users and the relative value Travelcard holders gain from their tickets.

10.48. We understand that, because it could not reach a satisfactory agreement with BR, LUL indicated that it wished to abandon the Travelcard agreement with BR in so far as it related to longer-distance journeys from outside London. It was, however, instructed by the then Secretary of State not to do so. Instead, LRT is now considering the introduction of its own Travelcard add-on which would be sold to BR season ticket holders from outside Zone 6 for less than the current excess that BR charges for a Travelcard as compared with a normal season ticket to its Central London termini.

The one-day Travelcard

10.49. LRT wishes to introduce an All-Day One-Day Travelcard. BR has only been prepared to introduce such a ticket at a tariff level which LRT considers unreasonably high, on the grounds that it would otherwise lose revenue from the introduction of such a card. In May 1991 LRT is introducing an All-Day One-Day Travelcard valid only on LRT services. We asked LRT why it wished to introduce such a card given that it might appear to contradict some of its key objectives, namely:

- (a) to maximise net revenue; and
- (b) to discourage additional travel in the peak period.

10.50. LRT responded that it considers that the new ticket caters for a group of passengers who will find it convenient and attractive and that prices are being pitched so as to render the risks of revenue loss minimal. It considers that the additional travel will be mainly in the off-peak. LRPC told us that it strongly supported the idea of an All-Day One-Day Travelcard and had for some time been pressing LRT to introduce it.

Stored Value Ticketing

- 10.51. LRT is considering for the longer term the case for, and feasibility of, a system of SVT based either solely on the same magnetic technology employed by the UTS gates or with appropriate add-on advanced technology which is now available. It has been felt that SVT might enable LRT to target fares better both to different travel modes and by time of day.
- 10.52. A working party was set up to examine the potential for SVT. It concluded that it was unlikely that it would be practicable and worthwhile to consider introducing SVT to LBL or DLR in the immediate future. There might, however, be a case for introducing SVT to the Underground.
- 10.53. The main disadvantage of extending SVT to the Underground is the cost of providing UTS gates at the majority of stations not already covered by the system. This has been estimated to cost in excess of £90 million. It was concluded that the application of SVT to the whole network may be financially worthwhile, though this conclusion is very sensitive to variations in the estimates of benefits and costs.
- 10.54. The working party recommended that, subject to the necessary financial provision, LUL should initiate work on preparing a detailed technical specification and implementation timetable for a Zone 1 trial of SVT. A final decision on whether to proceed with this trial would, however, depend upon further research including a review of the practicability of operating SVT at stations where gated entry or exit is not possible. LUL/LRT would also need to take a view before implementing the trial that SVT was a potentially acceptable longer-term strategy for the Underground.

Statement of future fares policy

10.55. The Fares Revenue Committee has been considering whether LRT needs to develop a revised statement of its fares policy and has put forward suggestions for consideration by the LRT Executive Committee. These views have not yet formally been accepted or rejected by LRT and may be influenced by the response to LRT's recently published Consultation Document 1991 to 1994, in which LRT has asked for views on issues relating to fares, ticketing and funding.

10.56. LRT states in its Consultation Document that the quality of service provided is an important consideration in setting fares and that if improvements are to be made in services passengers will have to make a contribution. LRT also indicates that the possibility of increasing the differentials between peak and off-peak fares to encourage travel outside the most congested periods remains under consideration and any real fares increase could also contribute to moderating peak demand. On ticketing issues the Consultation Document states that, while innovations and modifications always have a place, there are no plans to change the broad structure that currently exists. In particular LRT recognises the popularity and perceived benefits of the Travelcard to the travelling public in London arising from the flexibility afforded between tube, bus and rail.

Conclusions and recommendations

Statement of fares policy

10.57. LRT is responsible for controlling the general level of fares policy. Its policy is to increase fares in real terms towards a point where LUL's revenue covers all costs of LUL's operations. It does not at present have any formal guidelines as to how this can best be done, and in particular what weight should be given to the needs and costs of catering for different types of traffic. The Fares Revenue Committee has, however, recently prepared a revised statement of fares policy which has been sent to the LRT Executive Committee for consideration. The recent LRT Consultation Document 1991 to 1994 comments on fares policy and seeks the public's views.

10.58. We consider that LRT should, as soon as possible, spell out more clearly, both for the benefits both of its own staff and of its passengers, a clear description of its fares policy. We therefore recommend that LRT should agree and by the end of 1991 publish a revised statement of its fares policy.

Level of fares

10.59. Even though the Government had earlier indicated that it expected LRT to plan on the assumption of real price increases LRT, and hence LUL, has not recently been able to implement the preferred strategy of raising fares as much in real terms as it intended because of Government concern.

10.60. We conclude that this seriously damages LUL's ability to plan its medium-term strategy on a consistent basis. Whilst we appreciate that the Government wishes to retain the right to influence fares policy in the short term, the current system may not be the most efficient way of so doing. Instead we recommend that LRT and DTp should consider establishing a long-term contractual relationship based on the review, discussion and approval of LRT's strategic plans. This contract should include an agreement on the level of annual real fares increases which will be permitted to LUL during the period of the Strategic Plan and the formula by which such increases will be calculated. If DTp were then to decide that a different policy in respect of LRT's fares were more appropriate, LRT should receive a compensatory grant to make up for any resulting shortfall in funds. We further recommend that, if possible, agreement on such a contract should be completed prior to the publication of LRT's next Strategic Plan.

Structure of fares

- 10.61. LRT's, and hence LUL's, ability to change its fares structure has recently been constrained by requests from the Government not to raise individual fares by significantly more than the overall average real fares increase.
- 10.62. We believe that this undesirably reduces LRT's freedom to adjust its fares to meet its policy objectives. We therefore recommend that LRT should be given greater freedom to alter individual fares within any agreed average overall percentage increase for all fares.

Relationship of fares to costs

- 10.63. Many of the costs of providing LUL's services are joint costs, and not specific to the operation of individual services at particular times of day. Other costs are specific to particular services. LUL carries out occasional analysis of the costs of operating specific services. It does not, however, prepare regular estimates of the costs of operating specific services on different sections of its network at different times of the day.
- 10.64. We believe that, notwithstanding the difficulties of allocating costs to specific routes at different times of day, the preparation of line-specific and, where appropriate, section-of-line- specific costs on a regular basis would:
 - (a) help LUL to set fares which more truly reflected costs; and
 - (b) help to identify those services which were not covering their marginal costs of operation.
- 10.65. We recognise that there are important conceptual problems in deciding what costs are incurred by, and are therefore specific to, particular lines or services. Nevertheless we recommend that LUL should institute a regular system for estimating costs by section of line and time of day as part of its ongoing management information. This system should be introduced within one year from publication of this report.

Zonal pricing system

- 10.66. LRT has told us that in the design of the six-zone system it is balancing simplicity, which makes for operational ease and passenger convenience, against more complicated structures which attempt to match the market more finely.
- 10.67. We believe that it would be desirable to study in more depth the arguments for and against the current zonal system. We therefore recommend that LRT should carry out an in-depth review of the merits of the present zonal fares system and whether it would be better to replace it with a system which more closely reflects the costs of each individual journey made.

Peak and off-peak fares

- 10.68. At the moment the only differentiation between fares charged in the peak and off-peak is the non-availability of the one-day Travelcard until after the morning peak. But this Travelcard is valid during the evening peak.
- 10.69. We recommend that LUL needs to consider more carefully the relative cost of providing peak and off-peak services and whether fares are appropriately structured to reflect such cost differences. After due consideration and analysis LUL may wish to introduce a revised fares structure which takes into account more directly the relative costs of providing peak and off-peak services.

Travelcard and the evening peak

- 10.70. LUL does not consider that the effect of the promotion of the one-day Travelcard on the evening peak is at present a problem. In the past the main concern has been the morning rush-hour where demand has been more peaked. Demand at the evening and morning peaks, however, is now very similar. We are concerned that if Travelcard increases peak problems in the evening its pricing as an off-peak product may not be appropriate.
- 10.71. We conclude that LUL should look more closely at the effect of the one-day Travelcard on evening peak demand.
- 10.72. We recommend that LUL should undertake a review to assess the effect of Travelcard on demand during the evening peak within 18 months.

Pricing of Travelcard

- 10.73. LRT has pointed out that it is in the interests of London as a whole and its efficiency as a city that maximum use should be made of public as opposed to private transport. It believes that Travelcard helps achieve this. It also believes, however, that Travelcard is underprized and it would like to raise the premium for Travelcards to a higher level compared with ordinary single tickets.
- 10.74. We would agree with LRT that Travelcard has an important role to play in encouraging the use of public transport in London. We therefore recommend that the Travelcard product should be retained. We would also agree that Travelcards appear to be underpriced and that there may therefore be a case for increasing their price relative to ordinary single tickets. We would, however, recommend that any decision to increase the relative price of Travelcards should be dependent upon the revised statement of LRT's fares policy (see paragraph 10.58) and should not be introduced until that statement has been agreed and published.

Allocation of Travelcard revenue

- 10.75. We note that LRT and BR have not been able to reach a mutually satisfactory agreement on the distribution of Travelcard revenue. We further note that as a result of this disagreement LRT has considered introducing its own LRT-only period season ticket which would provide a cheaper add-on to BR point-to-point season ticket holders from outside London.
- 10.76. We recommend that the two operators should continue their efforts to reach a mutually satisfactory agreement. If they cannot do so DTp should be prepared, if necessary, to determine what it considers to be a fair distribution of Travelcard revenue and instruct the two companies accordingly. We would not recommend that LRT should introduce its own ticket just because it could not reach agreement with BR on the distribution of Travelcard revenue between the two organisations.

Stored Value Ticketing

- 10.77. LRT is considering the possibility of introducing SVT. This would enable more flexible forms of pricing to be introduced. The financial justification of the investment required has yet to be proven. LUL is considering undertaking a limited trial in Zone 1 from which it would expect to have a better understanding of the costs and benefits.
- 10.78. We believe that provided a financial case for the necessary investment can be sustained, SVT could prove very beneficial in helping LUL to adjust its fares policy to reflect more closely the balance between supply and demand at different times of the day. We therefore recommend that LUL should be encouraged to examine further the potential for SVT.