

## CHAPTER 3

### Quality of service

3.1. Quality of service is very important both to operators of buses and to users. It is important for the operators because their purpose is the provision of service in the form of transport. It is important for users because many people are strongly influenced by bus services in their habits and activities and derive from bus services much convenience or inconvenience. Because of this importance, various aspects of quality of service are the subject of current debate. In part this debate relates to the tension, or even conflict, between level of service and commercial viability; and there is an important area of technical discussion concerning the attempt to define measures of quality and set standards.

3.2. In spite of this, our discussion of quality of service in this chapter is brief. We have to consider quality of service only to the extent that it is relevant to our terms of reference. The terms of reference touch upon quality of service only in requiring us to consider whether each of the undertakings referred

‘could improve its efficiency and thereby reduce its costs without significantly affecting the level of services provided’.

For this purpose it is necessary to establish the present level of service and its trend. This chapter sets out our findings in this restricted area.

3.3. For an individual user the level of service provided is represented by the convenience and cost of his particular bus journeys, for which train, private car, taxi, bicycle or walking may present alternatives and with this convenience also associate the cost. There is not, however, any single measure of quality, by which the level of service can be assessed from the individual user's point of view or aggregated to represent the level achieved by an operator comprehensively. In the absence of such a measure, service is commonly judged by reference to the structure of the network, the schedules, the efficiency of operations and fares. We have used these measures, but in interpreting them and the trends which they reveal it is necessary to remember that they are only indications of the quality of service which the operator provides.

3.4. The quality of service experienced by the traveller is a combination of many factors, the most important of which are travel time, reliability, comfort and cleanliness. Travel time comprises walking to the bus stop, waiting time, the time on bus and the walking time to the final destination. Reducing any of these elements incurs increased costs, and there will always be significant variations in service level from route to route and from hour to hour.

3.5. Reliability is determined by a combination of service cancellations (‘lost mileage’), and the extent to which buses run to their schedule time. Whilst a shortage of buses or men can account for a large part of variations in

reliability, some are caused by weather or traffic congestion for which managements are not responsible. Comfort and cleanliness depend mostly upon vehicle design and the frequency and efficiency of cleaning but in part upon actions of travellers themselves. Vandalism is an extreme example.

3.6. With these elements of service one should also link the dissemination of information. A lack of detailed information about bus times itself reduces the value of the service provided.

### **Quality standards and quality control**

3.7. In general the network structures of the four undertakings have been stable over a long period of time, although there have been some extensions to cater for new housing developments and some cutting out of routes where demand has fallen significantly. However, in all four undertakings, over the past five years, as demand has fallen steps have been taken to reduce service levels to prevent large deficits. The actual rate of reduction has often depended upon the amount of revenue support provided by local authorities for routes or for whole networks which have been incurring losses. This process has inhibited the setting of standards by the undertakings themselves.

3.8. None of the four undertakings has formal standards for any of the components of travel time. However, CCT is required by South Glamorgan CC to maintain the 1976 level of service and WMPTE is developing a procedure for setting its own standards for accessibility (eg distance from home to bus stop and service frequency). At present it uses informal guidelines such as:

- in the peak passengers should have, as far as possible, first bus availability;
- except in locations of very low demand the frequency should not be less than one per hour;
- no one should be more than 400 metres or 5–10 minutes walk from a bus route.

Moreover some non-metropolitan counties also have such standards (see Appendix 10.1).

3.9. All undertakings monitor lost mileage on a routine basis against a standard of losing none. Control is exercised by inspectors but the level of mileage actually lost depends upon the number of spare vehicles and crews, the quality of vehicles and maintenance and some other factors beyond the control of management such as traffic congestion. The causes of lost mileage are discussed in Appendix 3.3.

3.10. All scheduled services are planned to operate to time, but no analysis of the cost of this 100 per cent reliability has been undertaken. Operational control over timekeeping is undertaken by inspectors. Services can be re-routed or terminated before reaching their destinations in order to return running to schedule. Punctuality depends mostly upon the degree of time allowance built into the schedules for variations in road and traffic conditions, but partly on the extent to which the same bus serves more than one route.

Where routes are thus 'linked' across a city centre, such as in Bristol, great difficulty is experienced in maintaining timings primarily due to traffic congestion. None of the undertakings monitor punctuality regularly, although special exercises are often undertaken on receipt of complaints. In CCT for example there is a bus delays working group involving CCT and SGCC. Radio control in Bristol, Cardiff and the West Midlands does, however, help to provide closer control.

3.11. All the undertakings have formal standards for bus cleaning in three broad categories—daily sweeping of the interior, rather less frequent external washing and periodic cleaning of the interior panels and furnishings. These are set out in Appendix 3.1. All cleaning is monitored in WMPTE. Of the others BOC does not monitor at all, CCT and TMT monitor partially while all three carry out some spot checks of quality.

3.12. Each undertaking puts considerable effort into public relations and communicating with its customers including the use of local radio stations to inform the public of any disruptions. This is not entirely successful, because some passengers find timetables difficult to understand and late changes to services are particularly difficult to disseminate. Late or incorrect information can cause considerable difficulties for travellers.

3.13. However, all undertakings have a formal system for investigating the causes of complaints on any topic. All take disciplinary action over staff negligence or discourtesy and whenever practical try to take into account complaints on services when planning changes to them.

### **Performance trends**

3.14. It is extremely difficult to establish absolute or objective standards against which the quality of service provided by the undertakings can be measured. The only way to judge them therefore is comparatively, either comparing one undertaking with another, or one undertaking with itself over a period of time. Both methods have been used in the following paragraphs which summarise the detailed discussion in Appendices 3.2–3.4.

3.15. Passengers appear to be offered a higher level of service in WMPTE and CCT than in BOC and TMT in terms of the average distance from a bus route and the average frequency of buses (Table 3.1). However, this is only to be expected since the former two operate in urban and the latter two in largely rural areas. Whilst the structure and size of bus networks have remained fairly stable over the past five years, the level of service in terms of average frequency has been slowly declining. When we looked at particular routes we found that times of first and last buses had hardly changed over the last ten years and journey times have been virtually constant too.

3.16. Table 3.1 also shows that the average fare per journey has been increasing in real terms in all undertakings against a background of a reducing number of journeys.

TABLE 3.1 Trends in quality, real fares and passenger usage in the four undertakings (1975-76-1980-81)

Bus Undertakings	Quality of service		Fares		Passenger usage			
	Accessibility Average Distance to Bus Route in 1981	Frequency		Real Fares Paid per journey % Annual Trend	Journeys per unit population		Journeys per unit non- car-owning population	
		Buses/Day in 1981	Trend % Annual Change (1978-79 -1980-81)		Journeys in 1981	% Annual Trend	Journeys in 1981	% Annual Trend
WMPTE	0.28 miles	82.1	+0.3%	+8.43%	169	-1.7%	231	-1.5%
CCT	0.32 miles	61.4	-4.6%	+6.58%	125	0.0%	170	+1.1%
BOC	1.30 miles	23.2	-3.8%	+1.15%	50	-5.5%	75	-4.7%
TMT	0.66 miles	14.3	-3.9%	+9.42%	34	-7.3%	54	-5.9%

Source MMC study.

Note: Caution should be exercised in interpreting changes in passenger journeys when there have been changes in the number of linked services. This is particularly so in TMT where the number of linked services has been increasing.

3.17. Each of the undertakings has been able to stabilise the worsening trend of reliability in terms of lost miles. TMT and CCT have made particularly good improvements. This is discussed further in Appendix 3.3.

3.18. Appendix 3.4 discusses punctuality. The data cannot be regarded as representative since the only source available was sample surveys and these were conducted in only two of the undertakings. However, even on this basis, some punctuality is not up to standard. Table 3.2 shows the available detail, the source of which is discussed in the appendix.

TABLE 3.2 Percentage of buses in sample early or late at a terminal or timing point

	% late			% on time	% early			% within 5 mins
	Over 5 mins	1-5 mins	0-1 mins		0-1 mins	1-5 mins	Over 5 mins	
WMPTE*								
Depart	1.2	10.6	8.2	79.6	0.2	0.2	—	98.8
Arrive	4.8	21.2	7.0	32.3	11.3	21.0	2.4	92.6
BOC (city)								
Depart	32	28	12.5	11.1	4.7	7.4	1.6	66.4
Arrive	38	32	9.6	6.6	9.1	3.8	—	62.0

Source: WMPTE and MMC study.

\* WMPTE running agreement allows early arrival at terminal provided that time is maintained at penultimate timing point.

### Safety

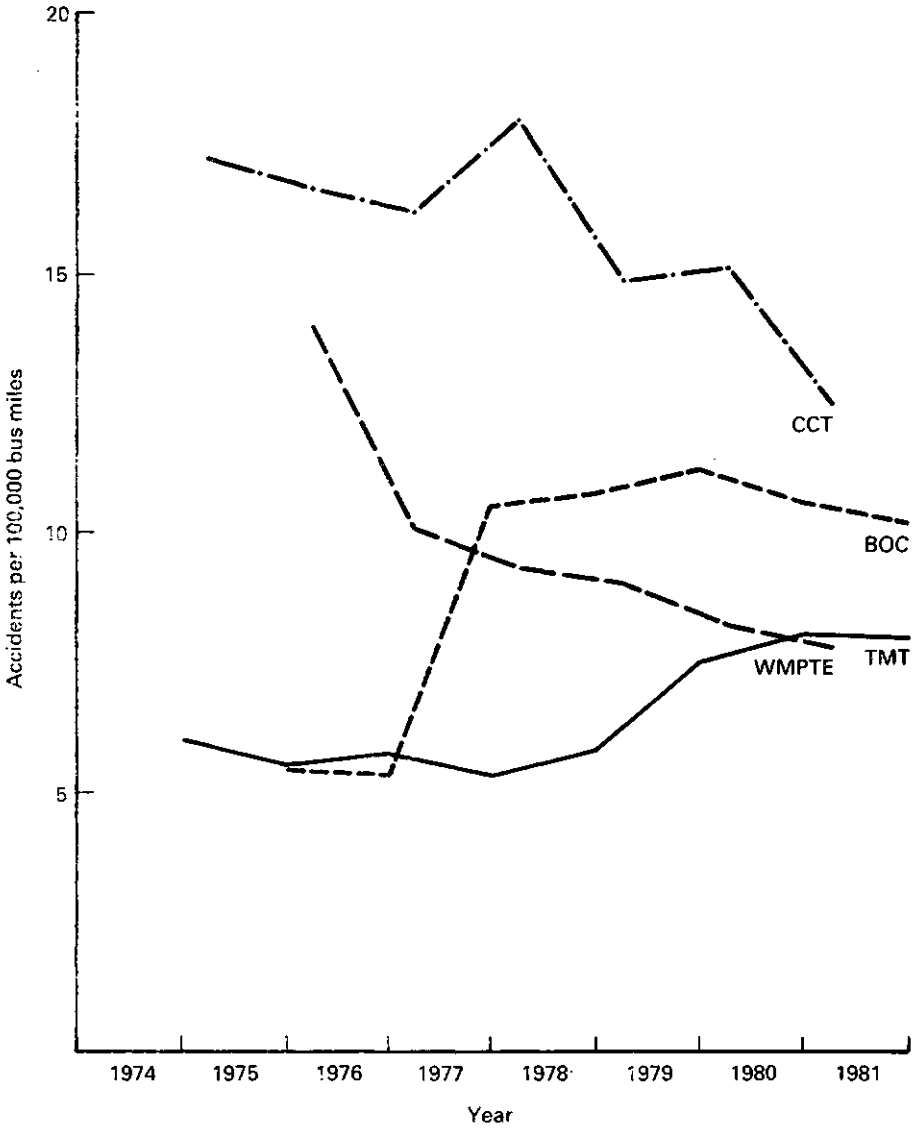
3.19. Figure 3.1 shows the accident trends for the undertakings. In 1980-81 the number of accidents of all kinds for all the undertakings lay between 7.5 and 12 per 100 thousand bus miles. In Cardiff in 1975-76 the number of accidents was three times greater than in two of the other undertakings. Since then it has improved significantly. This shows the effect of a determined safety campaign. The reason for the worsening position in BOC and TMT is not known but may be due to withdrawal of mileage in the more rural areas where accidents are less frequent. These accidents result in a fatality rate of between one and two deaths per year per ten million bus miles including fatalities to other road users.

### Cleaning performance

3.20. Table 3.3 shows the performance of the four undertakings in the proportion of target cleaning schedules achieved, for a summer and winter period in 1981-82.

3.21. The indications are that the level of achievement of targets for the daily internal sweep of buses is high, but that performance for external wash and special internal cleans are variable and often low in all undertakings.

FIGURE 3.1. Numbers of accidents per one hundred thousand bus miles for each of the bus undertakings, 1974-81



Source: MMC study.

**TABLE 3.3 Bus cleaning performance for a summer and winter period in 1981 in terms of proportion of target schedule achieved**

	<i>Exterior wash</i>		<i>Interior sweep</i>		<i>Interior special clean</i>	
	<i>Summer</i>	<i>Winter</i>	<i>Summer</i>	<i>Winter</i>	<i>Summer</i>	<i>Winter</i>
<b>WMPTE</b>					four	four
South Division	58%	80%	98%	100%	wkly	wkly
North Division	67%	71%	81%	89%	20%	86%
East Division	over 100% (Sept)	over 100% (Jan)	over 100% (Sept)	over 100% (Jan)		
					63%	58%
					32%	89%
					71%	40%
<b>CCT</b>						
	69% a week in Sept	61% a week in Feb	100% a week in Sept	100% a week in Feb	51% month of Sept	90% month of Feb
<b>BOC</b>						
North Eng Div (for two depots)	NA	NA	NA	NA	91% (July)	90% (April)
<b>TMT</b>					month 60% of June	month 81% of Jan
	87% (June)	76% (Jan)	100% (June)	100% (Jan)		

Source: MMC study.

### Views of bus users

3.22. Three sources have provided an indication of users' views:

- evidence submitted to the Commission;
- surveys undertaken by the undertakings;
- an analysis of complaints received by the undertakings. An analysis of complaints and of the general attitudes expressed in the evidence submitted to the Commission cannot be regarded as being very precise and some caution is necessary in any interpretation placed upon them.

### Evidence submitted to the Commission

3.23 The Commission have received evidence from a number of individuals and organisations (Table 3.4). The response rate has been fairly low for all organisations about each undertaking. The Commission did receive a number of letters from private individuals about BOC mostly concerned with the recent service restructuring resulting from the MAP<sup>1</sup> exercise.

3.24. Table 3.5 summarises the nature of the comments contained in the submissions. With the rather poor response rates, the only conclusion to be drawn concerns the widespread dissatisfaction with the restructured services in BOC. It would appear from reading the individual letters that where major structural changes are made in a very short timescale with cost as a major criterion a significant level of discontent may result. Slower changes may allow time for assimilation and adjustment.

<sup>1</sup> Market Analysis Project.

**TABLE 3.4 Volume of evidence submitted to the Commission by local Chambers of Commerce, major customers, user associations, private individuals**

	<i>Chambers of Commerce</i>		<i>Major customers</i>		<i>User associations</i>		<i>Private individuals</i>
	<i>Number of invitations</i>	<i>Number of replies</i>	<i>Number of invitations</i>	<i>Number of replies</i>	<i>Number of invitations</i>	<i>Number of replies</i>	<i>Number received</i>
WMPTE	10	3	10	2	19	2	1
CCT	2	1	10	4		1	
BOC	16	3	10	5		1	8
TMT	9	2	10	6		1	

Source: MMC study.

**TABLE 3.5 Nature of comments in evidence submitted by individuals and organisations**

<i>Area of comment</i>	<i>WMPTE</i>	<i>BOC*</i>		<i>TMT</i>	<i>CCT</i>
		<i>Organisations</i>	<i>Private individuals</i>		
Level of fares	1	2	12	2	
Level of service	1 <sup>†</sup>	5	53	6 <sup>‡</sup>	3 <sup>‡</sup>
Equipment			2		
Cleanliness					
Cost efficiency	3	1	3	1	
Courtesy			6		
Commercial/Social policy	2		6		1
Competition	1	2	3	2	1
Information		1	6		

Source: MMC study.

\* Includes two petitions counted as one communication; each.

† Expressed satisfaction.

‡ Major customer expressed satisfaction.

### Surveys conducted by the undertakings

3.25. The undertakings have all conducted attitude surveys to help match services and policies to the priorities of the user. In the case of WMPTE, BOC and TMT, these were conducted in association with a survey of travel patterns—area studies (household survey) and the COBS<sup>1</sup> system in WMPTE and the MAP<sup>2</sup> procedure in BOC and TMT. In each undertaking an attempt was made to pose questions in an unbiased way. The results of the attitude surveys are given in Appendix 3.5.

3.26. There is no strong evidence that passengers are generally dissatisfied with the service they are offered except in BOC where dissatisfaction was expressed with the new Bristol City services. It would appear that users accept that fares may have to rise but are concerned that they should be moderate. Their preferred alternative for reducing shortfall would be increased car park charges. They are concerned about maintaining the levels of service in preference to stable fares. Many passengers feel that timetables are difficult to understand.

<sup>1</sup> Continuous On-Bus Survey.

<sup>2</sup> Market Analysis Project.

## **Complaints**

3.27. Appendix 3.6 sets out the available data on written customer complaints. In 1981 most complaints concerned staff behaviour. In BOC complaints have been rising steadily.

## **Consultation with the consumer**

3.28. There is no Consumer Consultative Council for the bus industry. PTEs including WMPTE are required to set up a 'Transport Users' Advisory Committee' which comprises representatives nominated by district councils and civic organisations. A similar system, County Passenger Advisory Committees, for the non-metropolitan counties proposed in Cmnd 7131 in 1978 has not been established. WMPTE did not feel that the TUAC contributed significantly to the debate on various 'Value for Money' options, nor to the planning process. It considered that a reconstructed TUAC could make a more active contribution. In its view the TUAC currently tended to represent the views of pressure groups or activists rather than the consumer. None of the other undertakings saw merit in the establishment of consultative consumer bodies for the bus industry. They felt that the consultative process through the elected representatives of the local authorities and through the role of the Traffic Commissioners was adequate.

3.29. In 1981 the Department of Trade published a consultative document 'Consumers' interests and the nationalised industries' in which one of the proposed options was the establishment of sectoral councils to represent the interests of consumers. One of these, the 'Transport Council', would cover rail, ferries and the National Bus Company. The proposed organisation would include 'A National Council', regional councils and a third tier local representation. The form of local representation is not suggested in the report.

3.30. Quite small changes to the service on a particular route, can cause hardship and inconvenience to specific travellers. The hardship is greatest for those who have no access to a car or cannot drive, such as old people and school children. In planning routes or networks, the operator makes a judgment between social and commercial objectives and an acceptable degree of cross-subsidisation. It is during this process that the needs of such people should be identified and taken into account.

3.31. We think that this latter task properly belongs to elected members of local authorities. There is no need in our view to set up a special organisation which would represent public transport users.

## **Conclusions**

3.32. There has been a tendency among non-metropolitan counties and in WMPTE to adopt standards of accessibility as a basis upon which revenue support is given. BOC and TMT have also paid attention to similar matters in the course of MAP studies. If more counties and operators were to use such an approach, generally accepted standards for support might eventually emerge.

3.33. We should like to see improved and continuous monitoring of cleaning schedules at management level. However, we recognise that this may have significant cost implications. We recommend, therefore, that each undertaking should devise a system of periodic sampling which forms part of the monthly management information received by the responsible manager, and that minimum operational achievement levels should be set.

3.34. The extent to which punctuality is monitored varies considerably between the undertakings. They should all consider whether some more regular check on punctuality could be maintained for a modest cost, at the very least for less frequent services in rural areas, where keeping to time at intermediate points is just as important as timely arrival at the final destination. We acknowledge that to a great extent the punctuality of urban services depends on traffic congestion and for that reason it is beyond the control of operators.

3.35. It is clearly necessary for the needs of the travelling public and especially those who do not have access to a private motor vehicle, to be taken into account when bus routes are being planned. We believe that it is the duty of elected members of local authorities to perform this task, and that there is no need for additional consultative machinery to assist the process.