LTUC

# LONDON TRANSPORT USERS COMMITTEE

## Report to the Rail Regulator under Section 43 (3) (c) of the Railways Act 1993

## Closure of the Network and Discontinuation of Railway Passenger Services Between Farringdon Junction and Moorgate

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Contents



**1 September 2000**

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# 1

# The closure proposals

1.1 The closure proposals in question are:

a) Closure of the Network between Farringdon Junction and Moorgate with effect from 30 September 2003.

b) Discontinuation of Railway Passenger Services between Farringdon Junction and Moorgate with effect from 30 September 2003.

1.2 They were made under the provisions of the Railways Act 1993, and were supported by the Franchising Director. The proposals were advertised by the Franchising Director on 23 and 30 September 1999, in accordance with the requirements of the Act. The proposals were re-advertised on 1 November 1999.

1.3 The proposals were advertised along with other closure proposals relating to King's Cross Thameslink, Blackfriars and London Bridge stations[1]. The Committee has reported separately about those other proposals.

These footnotes refer to papers considered by the Committee as part of its process for considering the closure proposals, except where external documents are quoted.

[1] Document C

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# 2

# Procedural background

2.1 The Railways Act 1993 establishes a procedure to be followed for closure proposals relating to the national rail network. The relevant Rail Users Consultative Committee (RUCC) is required (under section 43 (3) of the Act) to:

a) consider whether or not the proposed closures will cause any hardship;

b) identify any reasonable means of alleviating any such hardship; and

c) prepare, and send to the Regulator, a report of the conclusions which it has reached in the discharge of its functions under paragraphs (a) and (b) above.

2.2 For the purposes of (b) above, the Committee is required not to conclude that any particular means of alleviating hardship is reasonable unless, balancing the cost to the Franchising Director (or any other public authority) of employing those means against the benefit of any alleviation thereby secured, the Committee is of the opinion, on the basis of the information supplied to it, that the expenditure involved represents good value for money.

2.3 At the time the closure proposals were made, the relevant RUCC was the London Regional Passengers Committee (LRPC). Under the Greater London Authority Act 1999, the LRPC was abolished and replaced by the London Transport Users Committee (LTUC), with effect from 3 July 2000. A Statutory Instrument made under the Act provided for the ongoing work of LRPC at the date of abolition to be carried on by LTUC, and for such work to be regarded as continuous.

2.4 Provisions in the Greater London Authority Act allow for non-Members of LTUC to serve on LTUC's Sub-Committees, with the consent of the Greater London Assembly. The Assembly consented to the appointment of Sir Alan Greengross and Caroline Millar to serve on LTUC's Closures Sub-Committee, thus ensuring continuity of Member involvement.

2.5 The two Committees have accordingly treated consideration of the closure proposals as one continuous stream of work. References to 'the Committee' in this report refer to whichever Committee was extant at the time in question, although the distinction is effectively meaningless in practice.

# 3

# Receipt of representations

*Closure process representations*

3.1 Under the statutory closure procedure, objections to the closure proposals are to be sent to the Regulator, who must consider them. (This is a change from the pre-1993 procedure, under which objections were to be sent to the Committee.) However, the Regulator must also send copies of the objections to the Committee. Because the Committee has a general duty to consider all the information it receives, it ought to consider the objections too.

3.2 A period of six weeks was allowed for objections; this was subsequently extended by about 5½ weeks. The Committee took into account all representations received, whether or not they were 'duly made' within the stated time limits. The Committee asked some objectors for further details of their objection or to clarify which of the various closure proposals they were objecting to; not all objectors responded.

3.3 266 representations were made regarding the closure proposals in question. Eight were wholly supportive, one was not objecting but proposed measures to alleviate hardship, and the remainder were objecting.

3.4 The letters of support were from local authorities and the Thameslink 2000 Consortium. The objections were from local authorities, a range of other institutions and individuals.

*Transport and Works Act objections*

3.5 The situation was complicated by the fact that, in parallel to the closure process, Railtrack has applied for a Transport and Works Act (TWA) Order to carry out the Thameslink 2000 works. The TWA process also included a period for lodging objections. Railtrack sent the Committee copies of the TWA objections that it considered relevant to the Farringdon-Moorgate closure proposals.

3.6 The Committee asked the Regulator for advice on how these should be considered. In essence, the Committee was directed to take them into account, but should consider for itself how much weight to give them[2].

[2] Document B, Annex 1

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# 4

# The Committee's consideration of the proposals

4.1 Although there are, technically, two separate closure proposals, they relate in practice to the same scheme. Indeed, if either of the closures took place, it would have the same immediate effect as both together would have done. The Committee therefore considered them as one and the same proposal.

4.2 The Committee requested, and was granted, an extension of the reporting period, until 5 June.

4.3 In accordance with the Committee's Rules of Procedure, a Sub-Committee was appointed to deal with the closure proposals on behalf of the Committee. The Sub-Committee also dealt with the proposed closures of parts of the network at London Bridge and Blackfriars stations, in view of the potential overlap between the likely issues involved; a separate report has been issued on those closures. (A separate Sub-Committee was appointed to deal with the King's Cross Thameslink closure proposals.)

4.4 Members of the Sub-Committee were supplied with copies of all the representations received under both processes that related, or appeared to relate, to the closure proposals in question. Members of the Sub-Committee paid an extensive site visit to the line in question on 21 March.

4.5 The Sub-Committee met on 3, 5 and 6 April to consider the proposals, to hear new or additional representations, and to consider its response. Everyone who had made representations on the closure proposals in question was invited to attend the meeting. Posters were also put up at the central London stations directly affected, giving the details.

4.6 The Minutes of that meeting are attached as Annex 1. At that meeting, London Underground (LUL), one of the objectors, informed the Committee that it did not yet have a firm opinion on the acceptability of Railtrack's proposed design for Farringdon station, but that it was working towards having one. The Sub-Committee felt that LUL's opinion would be an important one, and therefore adjourned its consideration of the proposals. Because of this, the Committee asked for, and was granted, a further extension of its reporting deadline, until 4 September.

4.7 The Committee was subsequently informed that an agreement had been reached between LUL and Railtrack about Farringdon station, and the Sub-Committee accordingly met again on 1 August. The Minutes of that meeting are attached as Annex 2. At the meeting, Railtrack presented a revised design ('SDr1b') for the station, which was to be submitted to the TWA process. Before that meeting, the Committee had sent a drawing of the revised design to everyone who had made representations on the closure proposals in question, and had invited them to comment further if they wished. A few did so in writing, but none spoke at the meeting.

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4.8 The Sub-Committee met again on 24 August to consider a draft report and to determine the final report.

4.9 This report should be read in conjunction with the attached Minutes of the meetings on 3/5/6 April and 1 August, and with the documents considered by Members. The Regulator already has a copy of each of these, and members of the public may obtain copies from the Committee Secretariat.

4.10 The Shadow Strategic Rail Authority's (SSRA's) Statement of Reasons for supporting the closure included a plan ('Plan No. 2') of the proposed design at platform level at Farringdon station. This turned out to be a superseded design that had been published in error[3]. Only one objector (the Corporation of London) appeared to have made a detailed technical examination of the design, and that objector was aware of the correct design. In any case, all objectors and supporters were sent drawings of the revised scheme that was put before the Committee, and had an opportunity to comment on that. For these reasons, the Committee believes that the error had no material effect on the representations received.

4.11 The Committee has no way of knowing whether the error caused people who might otherwise have made representations not to do so. However, given the high level of both institutional and individual representations, the attention that was paid to Farringdon station by objectors during the course of its discussions, and the subsequent revision to the design, the Committee is satis fied that the error had no effect on its conclusions.

[3] Meeting on 3/5/6 April, Minute 19.17

# 5

## The achievability of 24 trains per hour

5.1 The Thameslink 2000 scheme proposes that a service of 24 trains per hour (tph) during the three-hour peaks, and 18 tph off-peak, will operate through the core section (between Blackfriars Junction and St Pancras Midland Road).

5.2 A number of objectors doubted that such a service could be reliably operated[4]. There seemed to be two key sub-issues:

5.2.1 The first was the achievability of 18/24 tph on a timetabled basis. The focus of objections here was not so much that it could not be achieved 'with everything working OK', but rather that it could not be achieved and maintained in the 'real world' where perturbations will inevitably occur.

5.2.2 The second was the ability of the core to cope with more serious disruption, such as a train failure. This led to questions about whether adequate turnback facilities would exist.

5.3 These issues had implications for the closure process – in particular, whether retention of the Moorgate branch would provide operational flexibility or additional capacity, and whether Farringdon station would cope with the likely passenger levels and train service pattern. Some of these implications clearly affected consideration of possible hardship.

5.4 Although most of the objections on this topic (and indeed much of the information the Committee had initially been given in support of the proposals) showed few technical details, to fully investigate some of the contentious aspects would have demanded a great degree of technical understanding and discussion. Given the Committee's lay status, and given that the TWA inquiry was likely to discuss these issues in full, the Committee felt that it would not be appropriate for it to give such detailed consideration to the issue.

5.5 However, the Committee did consider the *implications for the effects of the closure proposals* of failure to achieve 18/24 tph. In effect, the Committee's deliberations posited two scenarios, according to whether or not 18/24 tph was found by the TWA inquiry to be achievable. Both of these are reported on below.

[4] Document M, topic 5. Document N, topic 1. Document O, topic 1.

# 6

# Conclusions and recommendations: general comments

6.1 The Committee's conclusions, and the reasoning behind them, are as follows. The conclusions are set out in **bold type**.

6.2 It is important to note that the Railways Act does not define hardship. Consideration of potential hardship could therefore not be limited to passengers currently using the line to be closed, nor indeed only to railway passengers at all. Similarly, consideration of potential hardship cannot be limited to examining the situation only at the closure date or only at the forecasting horizon set by the proposers.

*Possible design changes*

6.3 The closure proposals are linked with the TWA Order application for the Thameslink 2000 project; indeed, the Shadow Strategic Rail Authority (SSRA) has said that it and Railtrack would not proceed with the closures if the TWA powers were not given[5].

6.4 It is possible, however, that the TWA powers will be granted subject to amendments – i.e. the scheme would go ahead but with changes to the design. This would have implications for topics where the scheme design was important in assessing whether hardship would occur – notably, whether hardship would be caused to passengers interchanging at Farringdon, and particularly those displaced from direct Moorgate trains.

6.5 It is impossible to tell, at this stage, whether such changes would take place, how extensive they would be, or exactly what they would be. The Sub-Committee can therefore do no more than assess the closure proposals on the basis of the scheme as presented to it – i.e., the TWA application, as modified by the SDr1b design for Farringdon Station. Any changes as a result of the TWA process might require reconsideration of the closure proposals. The Committee would expect the Regulator to invite the Committee's views on any material change.

**6.6 Any consent to either closure proposal should be conditional on the TWA powers being granted, and on no changes to the proposal being required that were material to the possible effects of the closures.**

[5] SSRA Statement of Reasons, page 1. Also Meeting on 3/5/6 April, Minutes 2.5 and 3.4

# 7

# Conclusions and recommendations: demand issues

***Recent and current demand***

7.1 The line in question is currently open from Monday to Friday, with a substantial peak service and a light off-peak service. Barbican station is only served by southbound trains.

7.2 The SSRA Statement of Reasons suggested[6] that about 2,000 people per day, essentially commuters, used the branch in the with-flow direction in the morning peak in 1996 and 1997. Of these, about 250 travelled as far as Barbican, and the remainder to Moorgate. (The people using the line are referred to in this report as 'displaced Moorgate passengers'.)

7.3 Thameslink Rail supplied more recent figures, produced by weighing equipment on a number of their trains, relating to the period of the winter 1999-2000 timetable[7]. These figures were accepted by SSRA. The figures gave an AM peak with-flow total of 3,348, which represented a very substantial increase on the 2,000 that had previously been quoted. In discussion with the Committee, Railtrack and the SSRA put the increase down to two factors[8]: general (exogenous) growth in demand, and an increase in the level of AM peak service to Moorgate since the earlier counts, which had taken demand from the parallel LUL corridor.

7.4 The Committee had been concerned as to whether the 3,348 figure was in line with, or diverging from, the forecasts that had been used for the project; if it was the latter, the validity of the forecasts would have to be questioned. The SSRA and Railtrack felt that there was no need for concern on this front, although forecasts for 1999-2000 had not been made and so the 3,348 could not be formally compared with any predictions. However, the SSRA said that it would have expected, based on growth across Thameslink as a whole, use of about 2,600, before taking the increase in services into account.

7.5 In any case, however, the increase in demand appears to be an indication not merely of growing use of the branch, but also of the extent to which the level of service is itself a demand generator.

7.6 According to the SSRA, the daily use of the branch varies, as indeed do individual train loadings. The latter typically vary by about 10% on other routes, but about 40-50% on

[6] SSRA Statement of Reasons, Annexe 2, Section 3
[7] Document FF
[8] Meeting on 1 August, Minute 52

this route[9]. The SSRA believes this is because many passengers see the corridor as a whole, with both Thameslink and LUL services, as a choice of options for them; when one operator is disrupted, passengers use the other. Accordingly, there are more than 3,348 people – possibly about 5,500 – who may be regarded as AM peak users of the branch. Some will use it every day and some will use it only when the Underground is disrupted.

7.7 The SSRA told the Committee that the original figures (showing 2,000 passengers) were one-off counts. Given the reported volatility of the loadings on the branch, the Committee considers it rather unfortunate that this evidence, which the proposers had intended the Committee to rely on, now appears to be less robust than might have been appropriate. That said, the issue appears not to be central to the questions regarding the capacity of Farringdon station. The total current use of the two options between Farringdon and Moorgate, which appears to be rather steadier, is what matters to those questions.

7.8 The branch sees some counter-peak traffic (about 10% of the peak flow) and off-peak traffic (around 100 passengers each way during the inter-peak). It seems to be common ground that the corridor in question will in future remain dominated by the commuter flows. It is therefore clear that issues relating to capacity will centre around the peak commuter flows, whereas issues related to convenience will affect all the users.

***Incipient demand***

7.9 Thameslink Rail aspires (subject to a number of hurdles) to recast its peak service north of London in the Winter 2001-2 timetable[10]. Trains departing from Bedford between 07.00 and 08.30, and departing from King's Cross northbound from 17.00 to 19.00 would form an 18 trains per hour (tph) service, with all trains having 8 carriages. South of Farringdon, trains would run to/from Moorgate or through Blackfriars as the available paths dictated. Thameslink also aspires to an equivalent contra-peak service.

7.10 If this timetable were to be implemented, and extra trains were to run to or from Moorgate, it is likely that demand on the branch will rise, as seems to have been the case with the recent increase in service.

***Demand forecasts for 2011***

7.11 Many of the objections centred on the view that the proposed arrangements – particularly the alternative for the displaced passengers of interchanging at Farringdon and using LUL trains between there and Barbican or Moorgate – were insufficient for the numbers of passengers using them[11]. It was therefore clear that future demand levels, and how they related to the capacity available, would be an important factor.

7.12 Railtrack's demand forecasts have been made for 2011, which was chosen for being a reasonable time after Thameslink 2000 is due to open (in 2006), and a statistically convenient year, but at the limit of the period that the models were robustly capable of

[9] Meeting on 1 August, Minute 52.4
[10] Document K, Figure 6
[11] Document M, item 1

forecasting for[12]. They have been made using established rail demand forecasting models, and comprise both exogenous growth (i.e. that which will occur irrespective of Thameslink 2000) and endogenous growth (i.e. that which will occur due to the change in service patterns that Thameslink 2000 will bring)[13]. The forecasts consider the AM peak period.

7.13 Railtrack is working to a 'central demand forecast' (CDF). Railtrack considers this to be the level of demand that it is reasonable to plan and build for, and which should govern the minimum level of facilities required. Railtrack has no figures for the top and bottom of a reasonable margin of error; it believes that the amount of extra demand that it was reasonable to build for would depend on the additional cost (if any) of allowing for it[14].

7.14 In relation to Farringdon station in particular, most of the demand growth there is endogenous, arising as a result of the extra train services on the route that would divert existing passengers into the Thameslink 2000 core areas[15]. Railtrack and the SSRA accordingly believe that from 2006 the level of demand will already be approaching the 2011 figure. The 2011 figure itself could be reached slightly sooner or slightly later than 2011[16].

7.15 There is less certainty over what will happen after 2011. Railtrack's model forecasts a further 3% growth in journeys to London from the entire South-East between 2011 and 2021[17], although of course individual corridors are likely to differ from this. But Railtrack also believes that demand is likely to fluctuate around the CDF after 2011, reflecting economic cycles. The variation is likely to be up to about 10% above or below the CDF, across the whole of London and the South East, if historical patterns continue[18]. However, individual routes are inevitably likely to vary from the London-wide figure – as has been seen recently with the particularly strong passenger growth on some routes.

7.16 The Committee has no reason to doubt that the demand forecasting is, technically, anything other than the best available. Nevertheless, the Committee has a number of concerns about the appropriateness of relying on the CDF as the basis on which the scheme is planned:

Accepted fluctuations

(a) If fluctuations around the CDF, driven by the economic cycle, are expected as part of the forecast demand, then the design should be planned on the basis that it can accommodate them. Furthermore, the resilience of the design will be reduced during the higher parts of the demand cycle.

(b) Day-to-day variations will occur due to other factors such as the weather[19].

[12] Meeting on 3/5/6 April, Minute 38.2. Meeting on 1 August, Minute 53.4
[13] Document CC, item 10
[14] Meeting on 1 August, Minute 53.13
[15] Meeting on 1 August, Minutes 53.5 and 53.15. Also Document II, Annex 2, para. 4.2
[16] Meeting on 1 August, Minute 53.5
[17] Document II, Annex 2, para. 3.2
[18] Document II, Annex 2, para. 3.9
[19] Meeting on 1 August, Minute 54.15

Possible variations

(c) In any case, demand forecasting is inevitably an uncertain science[20]. Even if the forecasts are essentially correct, there will be tolerances above or below the CDF. The statistics for current movements at Farringdon, although the best available, also have some uncertainty[21].

(d) The forecasting date of 2011 is partly set by the characteristics of the modelling system (as opposed to a substantive reason). In any case, it is only five years after Thameslink 2000 is due to start operation – which is a relatively short time, particularly as it is likely to take a little while for the system to initially bed down after its opening. The route, and its infrastructure, is intended to last for a good deal longer than that (indeed, the Access Option, which is the basis of the proposed train service, is for 30 years). Hardship is entirely undefined by the Railways Act, and the Committee considers it reasonable, in the context of this major long-term railway, to consider possible hardship beyond 2011, where it is foreseeable now. Railtrack's modelling suggests further slow growth across the south-east as a whole, even without Thameslink 2000; even if the modelling is accurate, the corridors in question here may vary above or below that.

(e) Any over-shooting of either of the growth forecasts between now and 2011 will result in the CDF being exceeded. Indeed, extra exogenous growth will itself inflate the endogenous growth, as Railtrack acknowledged[22]. It is notable that demand forecasts are not always close to reality – as was the case on the original introduction of Thameslink services in the 1980s, when demand far outstripped the forecast.

Furthermore, the exogenous growth forecast inevitably depends on a number of assumptions about wider transport policy[23], which may or may not turn out to be justified.

In particular, there seems to be no reference to the possible impact of congestion charging, which is a Mayoral manifesto commitment and can therefore be regarded as reasonably likely to occur. This potential impact of this is a further uncertainty. The option that the Mayor is minded to adopt[24] would probably not have a revolutionary effect on demand on the corridor in question, but could increase it by a significant amount[25].

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[20] Document M, page 39
[21] Meeting on 1 August, Minute 52.10
[22] Meeting on 1 August, Minute 53.7
[23] Document C, item 10
[24] Mayoral consultation document: *Hearing London's Views*, July 2000
[25] The possible impact has been modelled as reported in *Road Charging options for London: A Technical Assessment.* Government Office for London, 2000. See Figures 5.2 and 5.7. Most notably, the AM peak trips in 2001 into Thameslink from the north / St Pancras and into King's Cross would increase by 12% and 8% respectively. These figures do not directly translate into an impact on the corridor in question, but there is dearly likely to be some impact.

Miscellaneous perturbations

(f) Disruptions to services, which are inevitable, will create unplanned random peaks in demand at particular times on particular days (as discussed below). These have to be considered, in addition to near-perfect running.

7.17 There are clearly a number of reasons why demand will, or could, exceed or fall short of the forecast. These involve a number of timescales – permanently, cyclically, day-to-day and for short periods during a peak.

7.18 The effects of any such exceedances will depend on the resilience of the part of the system in question. The extent to which those effects are then problematic will, in turn, depend on the timescales in question (for example, the problems caused by a rare situation are different to those caused by a situation which occurs every day).

7.19 Most of the reasons given above for why demand could deviate from the CDF are acknowledged by the proposers – most notably, they accept that cyclical demand variations are likely to occur[26]. If historical trends continue, these would probably exceed the CDF by 10% at the peak of the cycle.

7.20 The Committee therefore believes that, using the proposers' own forecasts, the situation must be assessed bearing in mind the strong risk of demand substantially above the CDF over various timescales.

7.21 However, in addition to that, the Committee would go further, and (for the reasons discussed above) believes that:

(a) the forecasts are more likely to further underestimate likely demand than they are to overestimate it, thus producing an even stronger likelihood of demand above the CDF, and a likelihood of substantial excess over the CDF; and

(b) because what happens after 2011 is a very open issue, there is a substantial likelihood of demand increasing still further after 2011 – indeed, not just by 3% as Railtrack's modelling predicts, but by more.

7.22 There is a particular issue relating to the sensitivity test that Railtrack carried out for the proposed design of Farringdon station. Railtrack contends that this represents an extreme position[27], for the following reasons:

(a) The CDF already assumes that in the long term the average level of peak period demand increases network-wide to the historically highest level.

(b) At Farringdon, significantly higher demand growth is forecast in the absence of the project due to the particular land-use assumptions employed for the area around the station and for the Thameslink corridor.

[26] Meeting on 1 August, Minute 53.15. Also Document II, Annex 2, para. 3,9
[27] Document II, Annex 2, Section 5

(c) The largest fluctuations from the historical long term average demand were +/- 10% A 20% increase therefore represents an increase twice as large as any previously seen.

(d) A 20% increase also represents a level considerably higher than the level forecast for 2021.

7.23 The Committee believes this position may not fully recognise the risks. In relation to the points above:

(a) This point is irrelevant. The issue is variations from the CDF, not from current demand. In any case, the CDF is itself what Railtrack believes to be prudent, rather than extreme.

(b) This point is also irrelevant. The issue is not about what will happen in the absence of the project.

(c) Indeed. But those fluctuations mean that, during the years at the top of future cycles, the sensitivity test represents only 10% above the forecast demand.

(d) Indeed. But 20% sensitivity in 2011 is equivalent to only 17% sensitivity in 2021 – or 7% sensitivity near the top of a cycle in 2021.

7.24 The Committee therefore believes that the 20% sensitivity test represents, in practice, a good deal less room for manoeuvre than might at first appear. Accordingly, the likelihood of the remaining uncertainties causing the 20% situation to be reached is greater than might at first appear.

7.25 The Committee accordingly assessed the implications of the closure proposals on this basis.

7.26 It must be stressed that the Committee's views are not all about demand *higher* than forecast. Many of the uncertainties described above could alternatively lead to demand *lower* than forecast (and the Committee also has views in relation to demand *at* the forecast level). However, the Committee believes that the nature of the uncertainties, and the environment in which they operate, are such that higher demand is sometimes the more likely error, and thus is the more likely error overall. It is also important to note that an excess of capacity in the system will not cause passengers immediate difficulties; a shortage of capacity will, to whatever extent, and thus the latter needs to be the focus of attention.

# 8

# Conclusions and recommendations: assuming that the 24 tph service is achievable

***Availability of alternative routes to passengers' destinations***

8.1 The area in question is served by a number of public transport modes and routes, including rail, Underground, buses and taxis. There has been no suggestion that serious socio-economic isolation would result from the closure.

8.2 Many objectors appreciated the directness of their service to Moorgate[28]. The most logical place to begin, when considering whether hardship would occur if the Moorgate branch were closed, is, therefore, to see whether the remaining Thameslink central area stations provide a suitable alternative. There are two key issues here: the location of the station, and the quality of the service.

8.3 The SSRA suggests that 22% of displaced passengers will be within 800 metres walk of one of the remaining stations directly served by Thameslink[29]. For some of that 22%, Farringdon is the only relevant station, and for others it would be the most convenient of the choices. The conditions for those passengers who would walk from Farringdon are discussed later in this report. For the remainder, the Committee considers the other stations to be a reasonable alternative for people with relatively unrestricted mobility, even though some of these people would probably have to walk further than they do at present from the relevant station to their ultimate destination (as suggested by Figure 4.1 of the Statement of Reasons). For passengers with restricted mobility who currently have only a short walk, the inconvenience would potentially be greater.

8.4 The second issue is the quality of service provided on the route. Many objectors, overwhelmingly commuters, contrasted the Moorgate service favourably with the cross-river service, which was said to be unreliable and/or more crowded. Other objectors made no such distinction[30]. But in any case, the comparison is of limited relevance to the post-2006 situation, as the Thameslink 2000 works will change the nature of the route. Railtrack and the SSRA believe that the reliability and capacity of the service will be improved as a result of the project, and that the cross-river route would not be the poor relation that it is said by objectors to be now[31].

8.5 If the proposed 24 tph service is indeed reliably achieved, then the through service would be an acceptable alternative for that 22% of the passengers. A longer walking route might inconvenience some of them, but this would not amount to hardship.

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[28] Document M, item 4
[29] SSRA Statement of Reasons, Annexe 2, paragraph 3.6 and Figure 4.1
[30] Document M, items 5, 7, 12, 21 and 23
[31] Document M, items 5, 7, 12, 21 and 23

8.6 For the remaining 78%, who would be more than 800 metres from a Thameslink 2000 station, an alternative route, involving interchange (or an additional interchange), is likely to be needed.

***Ability to get a seat on Thameslink trains in the evening peak***

8.7 Many objectors valued the Moorgate service for the chance it gave them of a seat on homeward trains northbound in the evening peak[32]. They compared it favourably to boarding a train coming from the south (or, indeed, to boarding a train from Moorgate at Farringdon), on which they would have had to stand. Some objectors referred to the stresses of attempting to find a seat, or of standing.

8.8 The current situation is not a wholly useful guide, as the post-2006 service and demand levels will be different to those of today. Railtrack believes that under the Thameslink 2000 plans and the forecast demand for 2011, there would 'generally' be enough seats for all passengers[33] boarding at Farringdon. By its calculations, if 50% of the three-hour demand was in the busiest hour, there would be around 17,000 seats going north from Farringdon, to be taken by about 16,000 passengers.

8.9 However, as described in section 7 above, the Committee believes that there is a substantial possibility of demand exceeding the forecast, on any or all of the permanent, cyclical or day-to-day bases, both before and after 2011. Given the relatively close matching of seats to the forecast demand, and given that inevitably trains will not be evenly loaded, the Committee believes that it is probable that some passengers from Moorgate will have to stand, even before 2011, and it is possible that many of them will have to do so.

8.10 There is no indication of whether, if the branch remained open, demand levels would be such that the number of passengers from Moorgate would exceed the number of seats available anyway. However, as Moorgate would be the trains' starting-point, passengers would at least have the opportunity to get a seat.

8.11 The Committee believes that passengers having to stand would suffer inconvenience, but that this would not amount to hardship. The Committee also recognises that the loss of seats for Moorgate passengers also involves a gain of seats for passengers from stations further south.

8.12 Passengers' current experiences are, however, especially relevant for the period between the closure date and the start of Thameslink 2000 services in 2006, when the 24 tph, mostly 12-car service will not be available. The Committee believes that passengers displaced from Moorgate are likely to encounter, during that period, the very cramped conditions that are spoken of in relation to today.

**8.13 Some hardship would be caused during the period from withdrawal of Moorgate branch services to the start of the full Thameslink 2000 service, by virtue of**

[32] Document M, item 7
[33] Document M, item 7

**passengers from Moorgate having to stand in the evening peak on very crowded Thameslink trains.**

8.14 The Committee believes that there are no reasonable means of alleviating this hardship. A substitute bus service would be impracticable, given the likely road congestion, and the major construction work represents a substantial constraint. However, the operators should give further consideration, in the time available until the construction period begins, to what steps could be taken.

***Use of LUL trains between Farringdon and Barbican or Moorgate***

8.15 Many objectors had referred to overcrowded conditions on the LUL trains between Farringdon and Moorgate, and some had safety concerns about this. Some, including people who used that line normally, referred to existing overcrowding that would be worsened; others spoke of their experiences when diverted from a disrupted Thameslink service. Some objectors spoke of jam-packed conditions; others simply of having to stand.

8.16 For LUL, overcrowding is defined in terms of its 'planning guideline capacity' (PGC). This is approximately one person standing for every person seated. LUL attempts to plan its services so as not to exceed this level; the crush capacity is far higher.

8.17 LUL has forecast demand for 2009[34], including the predicted effects of Thameslink 2000 (including displaced Moorgate passengers) and the Channel Tunnel Rail Link. Loadings between Farringdon and Barbican in the AM peak hour (as opposed to the three-hour peak) would be at about 80% of the PGC; looked at another way, an extra 4,000 people (or 28%) would be needed to reach that capacity.

8.18 If LUL's forecasts are matched by reality, there will, in the Committee's view, be inconvenience through having to stand, but no hardship. Indeed, the Committee believes that a reasonable level of standing at peak times, although not ideal, is inevitable on an urban metro system such as the Underground, and thus acceptable in practice.

8.19 The Committee was uneasy about the possibility of the PGC being breached in the foreseeable future, but could come to no substantive conclusion about whether that would happen. If it did happen, however, the level of crowding would amount to hardship. The hardship could be alleviated by technical developments in train design which gave greater loading capacity, but the Committee believes such developments could only be reasonably expected in the context of addressing train loading capacity on the LUL sub-surface lines as a whole, not just this particular section.

**8.20 If passenger levels on LUL trains between Farringdon and Moorgate exceeded LUL's Planning Guideline Capacity, hardship would be caused to passengers on those trains by virtue of the heavily crowded conditions.**

[34] Document DD, section 4

8.21 Some objectors referred to the poorer ambience of the LUL trains, and in particular their lack of toilets[35]. The Committee agrees, and believes there would be inconvenience, but no hardship. Indeed, the Committee feels that in the context of a one-stop or two-stop journey, such facilities are less important than maximum passenger capacity (especially given that overcrowding was by far the more common worry among objectors). To alleviate any inconvenience in this way would not be practicable.

8.22 Some objectors referred to long intervals between services resulting in overcrowding on the following trains. LUL's view[36] was that up to six cancellations (not consecutive) in the peak hour (0800-0900), which would be a 20% loss of service, would not breach the guideline. However, that does not address the question of consecutive cancellations (i.e., effectively, a suspension of the service for a short period). The Committee believes that consecutive cancellations are inevitable, and that they would result in hardship when they occurred. The Committee sees no realistic way of improving the essential reliability characteristics of the sub-surface lines in the foreseeable future. The numerous flat junctions, which cause much of the unreliability, are effectively unalterable. However, the Committee believes that LUL should nevertheless give consideration, between now and the closure date, to possible alleviatory measures.

**8.23 Hardship would be caused at times when the LUL service between Farringdon and Moorgate was suspended for short periods, by virtue of the level of crowding that would be experienced by passengers on the trains once the service resumed.**

8.24 An objector had suggested a shuttle service on the vacated trackbed, to allow displaced Moorgate passengers to reach Barbican or Moorgate without using the existing LUL service[37]. The City Corporation had examined this in depth. It felt that the shuttle service would not be able to run sufficiently frequently to be attractive to passengers, and would involve relatively unsatisfactory interchange arrangements at Farringdon[38]. LUL felt that it would not be a high priority for use of its resources[39].

8.25 The Committee considered the suggestion at length, and believes that although there seem to be difficulties with the idea, it should not be wholly ruled out, because the effectiveness of the currently proposed interchange at Farringdon is (in the Committee's view) an open issue. If a shuttle service would indeed have to involve difficult interchange arrangements at Farringdon, or would be incompatible with the more fundamental redesign of Farringdon station that the Committee recommends below, then it should be rejected. However, further work should be done to investigate this. If the shuttle service proved to be viable, the Committee accepts that it should be a peak-only service. In any case, however, the possibility of such a service underlines the importance of safeguarding the vacated trackbed (as reported below).

[35] Document M, item 27
[36] Document DD, paragraph 4.5
[37] Document M, item 1
[38] Meeting on 1 August, Minutes 22.3 and 24.7 to 24.9
[39] Meeting on 1 August, Minute 20.18

***Interchanging with LUL or with the street at Farringdon***

THE FACT OF INTERCHANGE

8.26 Some objectors said that interchange *per se* increased passengers' stress levels, and thus would cause hardship in comparison to the typical current commuter's ability to use direct trains[40]. The Committee was given no research evidence for or against this suggestion, and sees no reason to discount it. Nevertheless, the Committee believes that interchange *per se* is not an unacceptable or unduly difficult facet of rail travel, and for this reason believes that no hardship would accrue, as a general principle, on that basis.

A CROWDED INTERCHANGE?

8.27 But what *could* cause hardship would be a *particularly difficult* interchange or a particularly difficult exit/entry to/from the street. The Committee felt this to be a serious risk for displaced Moorgate passengers on a regular basis, and indeed to be the most serious problem with the closure proposal.

8.28 A number of objectors had described the difficulty of interchanging at Farringdon at present, particularly because of the crowded conditions[41]. They felt that adding displaced Moorgate passengers to the melee would make matters worse.

8.29 The post-2006 circumstances at Farringdon would be very different to those of today. The number of users is predicted to more than double (and the number of passengers using the Thameslink southbound platform will increase fivefold); the Thameslink train service is to be more frequent but serve a different set of destinations; and the station itself is to be partly reconstructed. Thus current experiences of interchanging at the station may or may not be replicated, and so the impact of the closure must be assessed in terms of the post-2006 situation.

8.30 Of the forecast users of Farringdon station in 2011, only a small proportion will be people displaced from through trains to/from Moorgate, or new users (arising from growth) who might otherwise have used those trains. The vast majority will be there for other reasons, including the attractiveness of the service[42]. Nevertheless, as the various interchange, entry and exit movements are not always physically separated, the station will effectively operate as a single system. This means, in turn, that changes to the level of demand for one movement will impact on all the others.

8.31 Because this was a *closure proposal* process, the Committee was not judging the proposed design of Farringdon station *per se*, but rather any hardship resulting from the closure, in the context of the overall situation at Farringdon.

8.32 The Committee therefore had to consider two potential impacts that might cause hardship. One was the effect (simply by their presence) of the displaced Moorgate passengers on the conditions experienced by other users of the station. The other was the

[40] Document M, item 19. Meeting on 1 August, Minutes 13 and 18
[41] Document M, item 1. Also meeting on 3/5/6 April, Minutes 6 to 18
[42] Document CC, item 11

effect of the (far larger) number of other users on the conditions experienced by the displaced Moorgate passengers.

8.33 Railtrack and LUL had extensively investigated the likely performance of the revised station design, through both static and dynamic modelling[43], at the central demand forecast (CDF), at 20% above this (at LUL's request), and in perturbed circumstances. The Committee has no reason to doubt the validity of the modelling techniques themselves, but is concerned at the implications of the results. The Committee believes that a great deal of weight must be given to LUL's technically well-informed and expert view. It is especially pertinent because LUL will be responsible for managing the station. The Committee would be concerned about the effectiveness of any design that did not have unreserved support from LUL.

**8.34 Any closure consent should be made conditional on the proposed design of Farringdon station having unreserved support from LUL for a planning period significantly beyond 2011.**

MODELLING OF FARRINGDON AT THE CENTRAL DEMAND FORECAST AND 20% ABOVE

8.35 The dynamic modelling showed that at the CDF, the level of crowding at the station would, according to LUL, be at a low enough level for any congestion to be adequately ameliorated by normal station management systems[44] (which would involve measures including encouraging passengers to move along the platform and closing entry gates). This performance was satisfactory to LUL, although LUL believes that the station would still be 'very crowded and busy'[45].

8.36 LUL also entertained the possibility that demand would be above the CDF. Accordingly, a sensitivity test was carried out, looking at demand 20% above the CDF in the AM peak. This showed up a problem involving the interchange staircases and the westbound LUL platform (platform 2)[46]. The route used by the displaced Moorgate passengers (coming from the southbound Thameslink platform) would remain relatively uncongested, apart from the stairs to the overbridge. But two of the three staircases land on the LUL westbound platform, which would be crowded throughout the height of the peak. This, LUL says, would add delay to the displaced Moorgate passengers. The crowding on the platform would require 'the utmost vigilance by station staff' and possible recourse to station management measures, which could lead to non-stopping of Thameslink trains. This would have to be anticipated, where possible, so that passengers for Barbican and Moorgate could be given the opportunity of changing at King's Cross.

8.37 A similar test was carried out for the evening peak, which indicated delay on the staircases up from the LUL westbound platform (which displaced Moorgate passengers would be using; the remainder of their route would be relatively uncongested).

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[43] Document EE. See also Meeting on 1 August, Minutes 54 and 55
[44] Document EE, page 7. See also Meeting on 1 August, Minute 54.4.
[45] Document II, Annex 2
[46] Document EE, page 7

8.38 LUL is therefore 'not yet convinced that the station would perform acceptably if the central demand forecast level is exceeded at any time in the future'. Indeed, LUL was not content with that situation, as it was in discussion with Railtrack about means of addressing that problem. Railtrack subsequently told the Committee[47] that it and LUL were close to agreement on this issue. The likely measures are discussed further below.

MODELLING OF PERTURBATIONS

8.39 It is also necessary to consider the effect of perturbations in the service, which will inevitably occur. This is because interruptions to train services will affect the level of crowding on the station and the flows of passengers exiting trains.

8.40 The model was accordingly run to test this, based on the CDF but with a perturbed train service[48]. The model involved gaps between trains of up to 8 minutes. The test showed that congestion during an extended service interval would be cleared within the following 15 minutes, provided the delay did not significantly reduce the number of trains in service (i.e. if the trains generally became bunched rather than cancelled – the 'catching-up' would be near-perfect). Management measures might be needed during and immediately after the delay, although LUL believed this would not place an unreasonable burden on its staff.

IMPLICATIONS OF THE MODELLING

8.41 The Committee has no reason to disbelieve the results of this modelling, but is extremely concerned at the implications of those results.

8.42 It appears that in 2011, if demand is as expected, under a near-perfect train service Farringdon station will only just be able to operate adequately. (LUL considers that the scheme 'strikes a fine balance between capacity and demand'[49].)

8.43 It seems that, in the planned situation, passengers would at best experience a busy station – busier than many would prefer, particularly those who were hitherto unused to the experience – with some delays due to the crowding. Restricting entry to the station (especially in the evening peak) will be part of the normal station management repertoire (i.e. it will be routine, although not necessarily frequent). This will undoubtedly be an inconvenience, delaying passengers. The passengers inconvenienced will mostly not be displaced Moorgate passengers, although some are likely to be, as walking to/from Farringdon is a plausible alternative route for them[50]. However, the displaced Moorgate passengers interchanging with LUL will be making a contribution to the level of crowding at the station, and to that extent they will (as it is a 'fine balance') be partly causing the inconvenience. The Committee believes that this inconvenience may amount to hardship.

[47] Meeting on 24 August
[48] Document EE, page 23
[49] Document EE, page 7
[50] SSRA Statement of Reasons, Annexe 2, paragraph 3.7 (ii)

**8.44 If demand is at or around the level of the Central Demand Forecast, hardship may be caused to any or all passengers using Farringdon station, by virtue of the level of crowding that would be experienced and the effects of managing that crowding.**

8.45 The sensitivity test, of an overall 20% increase in demand, also shows worrying results. In that situation, which again postulates a near-perfect train service, the displaced Moorgate passengers would encounter delays in interchanging, in both the AM peak and the PM peak. No doubt these passengers would also be adding delay to the others. Indeed, LUL believes that non-stopping of (southbound) Thameslink trains in the AM peak would be part of the management repertoire. The displaced Moorgate passengers would have to change at King's Cross (an interchange of several hundred metres), *if* the non-stopping was anticipated early enough, or would be carried on to City Thameslink. Similar problems would apply to all the other Thameslink passengers who wanted to board or leave southbound trains at Farringdon, and the presence of the displaced Moorgate passengers on the station would be a contributor to the situation.

8.46 Clearly, therefore, at 20% above the demand forecast there would be hardship to the Thameslink passengers as a result of the closure – for the displaced Moorgate passengers, directly; for the remainder, indirectly, by virtue of the additional crowding caused.

8.47 It is not so clear how the station would cope if demand levels were to be higher than expected but not up to the 20% mark. LUL said that the effects would depend on exactly which components of the demand were greater[51], and Railtrack is currently undertaking further sensitivity tests[52]. The Committee cannot take a fully informed decision in the absence of those results. However, there is clearly the possibility of hardship at less than 20%, depending on the precise resilience of the design. Additionally, the lower the resilience, the more often it will be that short-term demand fluctuations of any particular height will be problematic.

## THE COMMITTEE'S VIEWS ON FARRINGDON

8.48 The Committee then has to consider which of these scenarios are actually likely.

8.49 The Committee accepts that it is unreasonable to expect a station to be able to cope comfortably with extreme events. Nevertheless, the station should be able to cope with reasonably common delays, and be resilient to some demand increases. It is not clear to the Committee the extent to which passengers would be inconvenienced by the nature of the station (as opposed to the extended service intervals themselves). Nevertheless, the Committee believes that more substantial disruption than was tested is reasonably to be expected, and must be planned for.

8.50 The most recent statistics available[53] refer to a period of 16 weeks. During this time, there were 64 perturbations resulting in delays of 15 minutes or more on the Circle and

[51] Meeting on 1 August, Minute 54.15
[52] Document II, Annex 2, covering letter
[53] *London Transport Service Performance Review Third Quarter 1999/00* – [supplement] *Additional Information for the London Regional Passengers Committee.* LT Corporate Planning, February 2000. The equivalent statistics for other recent quarters are of the same order of magnitude.

Hammersmith & City lines, and 139 on the Metropolitan line (although some of those will be the same event affecting both lines). This means that such a delay is likely to occur somewhere on those lines about once or twice a day[54]. The figures for d elays of 30 minutes or more are about one third of those. Obviously, the origins of these delays are spread over the whole lines in both directions, although there will be knock-on onward effects. More importantly, the delays will be spread across the working day. It is not clear what proportion occur during the morning peak, but clearly such disruptions will not be rare events.

8.51 The Committee believes that such delays occur too often for them to be treated as exceptions. There will be hardship when those delays occur, and this will be often enough for them to be relatively significant hardship. As with the question of overcrowding on trains during delays, the Committee sees no realistic way of improving the performance, although LUL should still consider the issue.

**8.52 Hardship would be caused to passengers using Farringdon station, by virtue of the level of crowding at that station that would frequently be caused by delays to the LUL service.**

8.53 For the reasons given in section 7 above, the Committee believes that there is substantial possibility of demand growth substantially greater than the forecast. As described above, the Committee believes there is a reasonable likelihood that the 20% situation, or nearly that, would apply. There is accordingly a substantial risk of the hardships associated with that.

8.54 Indeed, given that the great leap in demand at Farringdon comes in 2006, when the endogenous growth is imported, and that demand will therefore be closely approaching 2011 levels in the years from 2006 to 2011, the Committee believes that the hardships identified on the basis of 2011 figures may well start to occur within the first five years of Thameslink 2000.

8.55 The situation after 2011 is unknown, although the modelling suggests slow growth. But 2011 is only five years after the system opens. Even if the CDF is correct, then it is a reasonable possibility that demand would go up after 2011 (indeed, Railtrack's model forecasts this), and that the situation would be worse than that postulated by the CDF.

8.56 The Committee also believes that there is substantial risk, even if the CDF is correct, of the situation found by the 20% sensitivity test occurring within the few years after 2011. There is accordingly substantial risk of the hardships associated with that. Similarly, there is a substantial risk of whatever hardships would be associated with growth above the CDF but less than 20% above it.

**8.57 There is a substantial likelihood of hardship being caused to passengers using Farringdon station, by virtue of the demand there exceeding the forecast by more than the station can adequately accommodate. The extent and timing of this hardship would depend on the level and distribution of this additional demand, its timing, and the flexibility of the station design.**

[54] Meeting on 1 August, Minute 54.19

COMBINATION OF FACTORS

8.58 The factors described above are not mutually exclusive. If, at any time, they were to work in concert, the overcrowding and the resultant hardship would be correspondingly greater. The Committee has, in particular, seen no evidence on how the station operating at 20% above the CDF would cope with the inevitable perturbations – much would depend on the relationship between the level of resilience and the particular combination of factors in question.

**8.59 The hardships identified above would be compounded if they occurred in combination.**

OTHER FACTORS AFFECTING THE STATION

8.60 The Committee is additionally concerned that (as Railtrack acknowledges[55]) part of the performance of the station will depend on such factors as the extent of platform canopies (affecting passenger flows during wet weather) and the location of information screens (particularly affecting passenger flows during disruption). It is not necessarily the case that the ideal extent and locations of the latter in terms of crowd management would coincide with the ideal locations in terms of passenger convenience. The proposed design of Farringdon station offers little leeway, and the Committee believes it quite possible that one or other facet could suffer.

8.61 It is also unfortunate that, in squeezing out the maximum capacity from the site, Railtrack has had to go so far as to eliminate platform seating. This loss will be particularly felt by passengers whose onward Thameslink service is one of the less frequent ones, and by passengers with limited mobility. It will add to the discomfort of the interchange. The Committee was heartened, however, to hear that Railtrack is investigating whether any seats can be retained on the Thameslink platforms (but not the LUL platforms)[56].

**8.62 Hardship would be caused, particularly to passengers with low-frequency services and to passengers with limited mobility, by the absence of seating at Farringdon station.**

8.63 Indeed, the Committee believes that this is not an acceptable result for a major station redevelopment on an important route.

WAYS OF COPING WITH THE DEMAND

8.64 Railtrack and LUL both told the Committee[57] that if demand were to exceed the forecast, then the way they would respond would depend on the nature of the excess demand and

[55] Meeting on 1 August, Minutes 55.6 and 55.16
[56] Meeting on 24 August
[57] Meeting on 3/5/6 April, minute 4.9. Meeting on 1 August, Minute 54.15

on the options that were available to meet it. LUL might choose to live with some situations[58].

8.65 The two operators intend to agree a mechanism for monitoring the demand on the station[59]. At certain trigger points, studies would be undertaken. If funding were needed for physical works, the relevant funders would be asked for approval. Depending on what element of demand was requiring the works, the cost might fall on the Greater London Authority or the Strategic Rail Authority (or both). A request for funding for this purpose would not necessarily take precedence over funding for anything else.

8.66 The most likely physical response to increased demand would be to adopt the SDR2 design. This involved using the area behind the north-eastern wall of the train shed as additional LUL eastbound platform space, slewing the LUL tracks and thus creating a wider platform for LUL westbound or Thameslink southbound or both (depending on the location of the congestion)[60].

8.67 This would inevitably involve a further period of substantial disruption[61]. This would cause major hardship, particularly in the absence of the alternative Thameslink corridor to Moorgate, although the Committee believes it would be necessary for long-term benefit. A similar conclusion might be reached if other disruptive ways were needed to cope with demand. In addition, the delay required to design, obtain consent for and organise the works would prolong the problems (which themselves might amount to hardship) that were requiring the response.

8.68 The Committee believes that a physical response to demand growth is likely to be needed relatively soon after 2006. Accordingly, the Committee believes there is a substantial risk of hardship being caused by such works.

**8.69 Hardship would be caused if further rebuilding work were necessary at Farringdon when demand exceeded the ability of the station to cope with it. This is likely to occur. It would be greater hardship than if the work were to be carried out sooner, at the time of the proposed rebuilding.**

8.70 Indeed, the Committee believes that it is unacceptable for the relatively high risk of the need for this work not to be addressed at this stage, rather than causing further disruption (to more people) later.

## ALLEVIATION OF HARDSHIP

8.71 Clearly, if hardships are caused by virtue of the conditions at Farringdon station, then improvements to that station might be a way of alleviating those hardship. (Such improvements might also be recompense for other hardships.) It may be the case that the hardships would not justifysuch a response individually but would do so collectively.

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[58] Meeting on 1 August, Minute 54.15
[59] Meeting on 24 August
[60] Meeting on 1 August, Minute 55.9
[61] Meeting on 1 August, Minutes 55.10 to 5.14

8.72 The Committee heard from Railtrack about a number of alternative designs that had been considered but rejected for various reasons[62]. In addition, a number of suggestions had been received by the Committee, from objectors and others, for alternative designs. Railtrack had given its assessment of these suggestions, which the Committee accepts can only represent a very preliminary level of analysis at this stage[63] – for example, Railtrack could not state with certainty, for some of the suggested alternatives, whether the listed station roof could be retained, or what degree of disruption would be necessary during construction. Similarly, the costs quoted to the Committee can only be regarded as indicative[64].

8.73 The Committee believes that a number of these alternatives have potential as ways of addressing the hardships. Given the inevitable lack of detailed analysis, and the Committee's status as a lay body, the Committee does not consider it appropriate to be prescriptive at this stage about what solution should be adopted. However, the Committee feels that:

(a) consideration should not be limited to the options which have been drawn to the Committee's attention, if other options exist;

(b) convenient cross-platform interchange for the key movements, and relatively straight platforms of relatively unrestricted width, should be aimed for;

(c) designs that would be incompatible with the construction of CrossRail should be ruled out, in view of the increasing likelihood of CrossRail being built in the foreseeable future (designs requiring only modest changes to the current CrossRail designs might be acceptable);

(d) in view of the importance of the station, at the centre of London's public transport network, the heritage issues should, if necessary, take second place to the transport issues; and

(e) the need to minimise disruption to the LUL corridor (in particular) during construction should be borne in mind, although the Committee believes that short-term disruption, if well-planned, is likely to be acceptable if it results in substantial long-term tangible benefits. On the evidence available, it seems likely that a slightly longer period of disruption at this stage would avoid the need for a second major period of disruption within a few years of the opening of Thameslink 2000.

8.74 To the extent that information is available on monetary and other costs, the Committee believes that a suitable design is likely to represent good value for money. This is because although the expenditure will be substantial, the benefits will accrue to very many passengers over the (long) life of the station, and the cost is unlikely to call the viability of the scheme as a whole into question[65]. The Committee notes that were

[62] Meeting on 3/5/6 April, Minute 19. Also Document CC, items 7 to 9.
[63] Meeting on 3/5/6 April, Minutes 19 and 31. Also Document CC, items 1 to 6.
[64] Meeting on 3/5/6 April, Minute 19.8
[65] See the cost-benefit appraisal – SSRA Statement of Reasons, Annexe 1, Table 5.1

Railtrack and LUL to feel unconstrained by the site, they would be looking to implement a more fundamental solution.

**8.75 The hardship caused by the conditions for passengers using Farringdon station would be substantially alleviated by the adoption of a more fundamental and robust redesign for the station. [To be carried out by Railtrack as a revision to the scheme design.]**

8.76 The Committee believes that there is a major public policy issue about whether transport schemes such as this should be planned on an incremental approach, or whether they should give the longer-term situation more weight. The Committee is firmly in favour of the latter approach, on the basis that (as experience on major rail projects has shown) failure to plan for the long-term is a false economy.

***Use of the LUL route to Moorgate: time penalty***

8.77 A number of objectors said that their journey time would be extended as a result of the closure. The components of this were: the delay due to interchanging at Farringdon, including congestion there and delays waiting for an LUL train; and delays whilst in the LUL train. A number of objectors referred to particularly extended times when the Underground was disrupted.

8.78 LUL had estimated both the actual and the perceived time penalty for the AM peak in the with-flow direction (which is applicable to the vast majority of passengers). According to LUL's most recent calculations[66] the actual delay to Moorgate passengers would be 2.6 minutes, and the perceived delay 8.3 minutes. The equivalent figures for Barbican passengers were 2.6 and 8.0 minutes.

8.79 LT reported, however, that variation in the actual time taken to interchange at Farringdon was the most important sensitivity for the journey time figures – in other words, the time taken to interchange would have the most significant impact on them[67]. The calculation assumed relatively uncongested conditions; a sensitivity test reflecting greater station congestion increased each of the actual time penalties by a further minute and the perceived time penalties by a further two minutes.

8.80 As described above, the Committee believes that congested conditions at Farringdon are likely to become the norm. Accordingly, the Committee believes that the extended time penalties are the more likely of the two sets of figures.

8.81 Regardless of that, however, the Committee does not feel that these figures reflect passengers' likely requirements. To assume an average waiting time of one minute for the Underground service is technically correct for when the service is operating smoothly, but passengers who (rightly or wrongly) perceive the service to be erratic are likely to allow substantially more time than that.

[66] Document II, section 4 updates the calculations originally given in Document F
[67] Document F, paragraphs 7.12 and 8.4

8.82 The objectors clearly do perceive the service to be erratic[68], and there is no reason why this should be substantially different in future. Accordingly, the Committee believes that passengers will (rightly or wrongly) allow substantially more time for their journeys than the figures suggest.

8.83 Furthermore, in any situation, whatever journey time allowances passengers make for their journeys, there will sometimes be occasions when perturbations exceed those allowances and make passengers late. Accordingly, the actual journey times experienced will sometimes be greater still. In addition, the change from using one train service to using two means that there is twice as much chance to have these delays – including delays on both systems in succession.

8.84 The return flow from Moorgate in the evening peak has different characteristics. The principal difference is that the train service onwards from Farringdon will run to a number of destinations, thus requiring passengers to catch the specific trains they need. For some destinations, these will be as few as 1 tph. It is therefore vital for many passengers that they reach Farringdon by a certain time, or else have to wait for the next suitable service. As may objectors pointed out, unlike in the morning peak, they could not plan to arrive one minute before their onward train in the knowledge at a minute or two either way was of little consequence. Given the importance of arriving at Farringdon by a particular time, passengers would allow extra time so as to allow for the inevitable perturbations on the Underground. A number of objectors referred to long delays on the westbound LUL line during the evening peak, which would compound the problem. The Committee agrees, and is disappointed that no attempt was made by the proposers to assess the likely time lost.

8.85 The Committee accordingly believes that the likely increase in journey time (both actual and perceived) for commuters in particular, even on a 'good' day, will be substantially more than the LT calculations suggest, and will be sufficient to be noticeable.

8.86 By way of comparison, the current journey time from St Albans to Moorgate in the morning peak is generally little more than 30 minutes, and from Luton about 45. Although a full calculation of percentage increases in journey time would obviously depend on how passengers reach their origin stations, a perceived increase of as little as ten minutes (which is merely the LT calculation) is clearly not a trifling sum. And, as some objectors pointed out, over a working week that figure would equate to nearly an hour for the mornings alone.

8.87 The Committee believes that hardship would be caused. To alleviate it, substantial in-vehicle speed increases are unlikely to be practicable (although limited improvements north of St Pancras Midland Road, as part of planned infrastructure renewal, might represent good value-for-money). However, the more fundamental redesign of Farringdon station that the Committee has recommended above would be of assistance.

**8.88 Hardship will be caused by virtue of the increased journey time for passengers, particularly to commuters returning to thenorth in the evening peak.**

**8.89 This hardship would be alleviated by the adoption of a more suitably capacious and robust design for the station, as considered above.**

[68] Document M, item 14

***Fares***

8.90 A number of objectors had concerns that using LUL to reach Moorgate would increase their fares; some felt this would cause them hardship[69]. The SSRA gave the Committee an assurance that this would not be the case, and that all fares to Barbican or Moorgate would be retained in line with current arrangements[70]. The Committee welcomes this, as such a fare increase would have caused hardship to many passengers. The Committee believes that the SSRA's assurance should be enshrined in any closure consent. There would be no cost.

8.91 Some objectors had suggested that Thameslink fares to Barbican and Moorgate from the north should decrease, to compensate for the reduced service quality that they felt they would have[71]. These fares to Moorgate and Barbican are currently deliberately made the same as fares to the other central London Thameslink stations. The Committee believes that the justification for reducing the fares to Barbican and Moorgate is not sufficient to justify reducing the logicality and coherence of the fare structure, and that reducing all the similar fares (to maintain that parity) would be unjustified.

8.92 The Committee also noted that the Thameslink fares to City Thameslink, Blackfriars and London Bridge from the north are currently the same as those to Moorgate[72]. This situation is currently ensured by the SSRA's fare regulation policy. The Committee considered whether Regulatory protection for this particular arrangement should be sought, in order to assist passengers for whom those would be reasonable alternative stations. The Committee concluded that the benefit to be gained from this would be too small to be a reasonable step. However, the Committee believes that appropriate people who currently use the Moorgate branch should be entitled to use the alternative stations without extra charge, for a limited period.

**8.93 Any closure consent should be made conditional on no fares for any journey rising through the need to use the Underground rather than Thameslink to reach (or start from) Barbican or Moorgate.**

**8.94 Any closure consent should be made conditional on any current users of the Moorgate branch who originate from points north, and for whom City Thameslink, Blackfriars and London Bridge would be reasonable alternatives, being able to have their ticket prices to those stations protected (for a limited period) from any increase in fares to those stations, compared to fares to Barbican or Moorgate.**

***Accessibility***

8.95 Some objectors had referred to loss of accessibility as a result of the closure. Neither Barbican nor Moorgate are fully accessible, except for cross-platform step-free interchange:

[69] Document M, item 6.
[70] Meeting on 3/5/6 April, Minute 2.10
[71] Document M, item 6
[72] Document K, Figure 9

(a) from eastbound Thameslink to westbound LUL at Barbican; and

(b) between westbound LUL and arriving or departing Thameslink trains at Moorgate.

8.96 Farringdon station is to be fully accessible, which the Committee welcomes. The step-free interchange movements listed above would be possible at Farringdon, and so there would be no loss of step-free accessibility due to the closure, although the interchange would no longer be cross-platform but would involve a longer route.

8.97 Some objectors had referred to the difficulty to some people with impaired mobility who can climb stairs with difficulty and who currently use Barbican or Moorgate, as a result of having to interchange additionally at Farringdon. The Committee believes that the step-free nature of Farringdon, albeit by a rather long and circuitous route for some movements, will mitigate this problem. There would be inconvenience, but no hardship. However, it is a further reason why a more fundamental rebuilding of Farringdon station is desirable.

***Conclusion on the closure proposal as a whole***

8.98 The Committee believes that the hardship that would be created by the closure will be substantial. Most of that hardship will arise from the problems at Farringdon, and will affect (to varying degrees) all the users of that station, not just the displaced Moorgate passengers. The Committee therefore believes that consent should not be given for the closure unless the proposed arrangements at Farringdon are substantially improved, so as to meet all the concerns expressed in this report.

8.99 If Farringdon station were made acceptable, and thus much of the hardship was alleviated, then the Committee would accept that the benefits of the closure, in the context of the Thameslink 2000 scheme, would far outweigh the disbenefits (including hardship) caused. The Committee would accept that the greater good should be served.

8.100 In more general terms than the issue of hardship, the Committee is very disappointed that a railway being built for the long term has, in Farringdon, such a weakness. The Committee believes that longer-term thinking there, coupled with a recognition that heritage issues must sometimes take second place if necessary, would result in a far more effective system. The Committee is heartened in this by both Railtrack's and LUL's views[73] that they would, ideally, be looking to undertake a more fundamental redesign which would result in a more capacious (and, in transport terms, more satisfactory) station.

8.101 Indeed, the Committee believes that the proposed design is incompatible with a railway that is being built for the long-term. It is also incompatible with the Government's aims for the public transport system. These seek, among other things, to encourage modal shift by making rail travel a convenient, acceptable and inviting option for people whose attitudes to travelling conditions are benchmarked against the travelling conditions in their cars, and who would not choose to use a difficult, crowded station.

[73] Meeting on 1 August, Minutes 54.16 and 55.27

**8.102 Any closure consent should be made conditional on Farringdon station being rebuilt to a design that addresses, to the Regulator's satisfaction, the hardships likely to be caused by the closure and the requirements of a railway designed for the future.**

***Safeguarding the corridor***

8.103 The vacated Thameslink trackbed between Farringdon and Moorgate would be a useful land resource in an important transport corridor. There are any number of possible reasons why the land might turn out to be useful for transport in the future, whether in terms of new facilities (for example, an east-west link) or of expansion or alteration of existing ones (for example, re-routing the LUL tracks in order to allow a revised layout at Farringdon, as is the case with some of the options that have been proposed[74]). Indeed, it is possible that at some point in the future (as happened with the Snow Hill Tunnel itself) operational, physical and demand circumstances might point to a resumption of the Thameslink service to Moorgate.

8.104 In a heavily built-up area, where acquiring and using new land is difficult, the trackbed should not be lost to the transport system. (A parallel may be drawn with the loss of land alongside Farringdon station, which has produced one of the constraints in the present proposal.) The cost of mothballing would be negligible, given that it is part of a continuing railway corridor. It would also be in line with current planning policy[75]. LUL saw no difficulty with this[76].

**8.105 Any closure consent should be made conditional on the vacated trackbed remaining within the railway industry, for future transport use as necessary.**

[74] Meeting on 3/5/6 April, Minutes 19 and 31
[75] *Planning Policy Guidance 13*, March 1994, paragraph 5.8
[76] Meeting on 3/5/6 April, Minute 20.18

# 9

# Conclusions and recommendations: assuming that the 24 tph service is not achievable

9.1 The Corporation of London, which had undertaken detailed analysis of the Thameslink 2000 proposals, believed that 18 tph was likely to be reliably achievable. The Committee therefore took this as the 'worst case scenario'.

9.2 The SSRA told the Committee how the train service would operate if 24 tph could not be achieved[77]. From the north, as many Great Northern line services as necessary would be omitted from the through service and would terminate at King's Cross. Thus the number of trains available to existing Thameslink passengers would not be affected. From the south, the situation is more complex, and the City Corporation disputes the SSRA's view of what could be done[78], but the exact outcome is not crucial to the present question.

9.3 It is not clear to the Committee how all the situations described in the 24 tph scenario might change if the proposed 24 tph service were not to be achieved. There would presumably be fewer passengers using Thameslink services to/from Farringdon than under the 24 tph scenario. The effect of Thameslink 2000 on the LUL corridor is complex[79], and (given the complex change to the Thameslink 2000 service pattern) the effects on LUL of less than 24 tph would presumably be similarly complex. There would be fewer Thameslink trains at Farringdon to disgorge people onto the station, but also fewer to clear them away.

9.4 Complicating the options further would be the question of whether the 30 tph 'catch-up' frequency, which would be used to assist recovery from disruption, turned out to be unachievable. There is also the possibility of the service starting at (say) 18 tph but increasing towards 24 tph over time as the operators gain experience in managing the system.

9.5 The interaction of the passenger numbers and the train service is what drives the conditions at Farringdon. With these uncertainties, the effect on the latter is clearly also uncertain. Given that Farringdon strikes a fine balance between demand and performance, the Committee believes that the possibility of Farringdon station being unable to operate adequately under a 24 tph scenario cannot be ruled out, or even regarded as minimal.

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[77] Meeting on 3/5/6 April, Minutes 26.19 to 26.22 and 27.7
[78] Meeting on 3/5/6 April, Minutes 27 and 30.
[79] See SSRA Statement of Reasons, Annexe 1, Figure 7, which shows changes in AM peak LUL passenger volumes

9.6 In a similar way, there would also be uncertainties about the utility of the other central London Thameslink stations as a substitute for the displaced Moorgate passengers, and also about the ability of those passengers to get a seat homeward on their evening Thameslink trains.

9.7 In terms of the effect on the LUL train service between Farringdon and Moorgate, the margin of error is that LUL predicts the service to be running at 80% of the planning guideline capacity in 2009[80]. The Committee feels that, in the context of uncertainty in demand forecasting, the train loadings *might* become a problem, but probably less pressingly so than Farringdon station might become.

9.8 For all these reasons, the Committee does not believe it can reach robust conclusions about what hardship would arise if the proposed 24 tph service were unachievable. Nevertheless, if the TWA inspector came down in favour of that scenario, the effects of the closure would clearly need to be reassessed by all concerned.

9.9 **Any closure consent should be made conditional on the TWA inspector being satisfied that the proposed 24 tph service is likely to be achieved in practice.**

[80] Document DD, paragraph 4.3

# 10

## Conclusions and recommendations: disruption during works

10.1 Consent is being sought to close the branch from 30 September 2003, although the latest plan for the implementation of the project assumes that the closure will take place in April 2004[81]. This is planned to coincide with the start of the blockade at St Pancras for the construction of St Pancras Midland Road station (SPMR)[82], during which period Farringdon is likely to see some trains terminating and certainly many passengers interchanging.

10.2 A number of objectors pointed out that construction work would be taking place at Farringdon station from 2003 to 2006, and questioned the ability of the station to cope with the demands placed on it during that period[83]. Indeed, during the period between closure of the branch and the start of the full Thameslink 2000 service, the Moorgate service would have been lost without the corresponding benefit in the Thameslink service, and possibly with constraints at Farringdon. Thus, it was suggested, hardship would be caused during this period.

10.3 The duration of the construction works at Farringdon would be substantial, and the Committee therefore felt that consideration of possible hardship during that time was appropriate, particularly as the timing of the works in relation to the closure would have a bearing on the way the works affected passengers.

10.4 Whereas objectors' views based on the current arrangement at Farringdon are of limited relevance to the post-2006 situation, they are highly relevant to the interim period.

10.5 The Committee agrees with them. In particular, the fact that the inevitably traumatic start of the post-Moorgate period is likely to coincide with the similarly traumatic SPMR blockade is a recipe for a great deal of confusion and crowding at Farringdon.

10.6 The Committee acknowledges that the works would inevitably cause disruption, which should be mitigated as far as reasonably possible. The Committee considers it important for the passenger-handling arrangements to be properly planned and implemented. This is not just in terms of passenger capacity and routes on the station, but also in terms of how passengers are assisted on the station, how they are told about the changes in advance, and the options available to them for avoiding the area.

10.7 Railtrack says that its planned construction arrangements for Farringdon (which the Committee has not seen) demonstrate the intention to provide in advance those

[81] Document M, item 16
[82] Document H
[83] Document M, items 1 and 16

passenger interchange facilities required when the Moorgate branch is closed[84]. The Committee welcomes this, but feels the issue is sufficiently central to passengers' experiences that any consent should be made conditional on suitable arrangements being in place – not just in terms of construction staging but also in terms of 'soft' factors. The cost of these arrangements is likely to be very low, compared to the overall project costs, and will be justified by the benefits.

10.8 **Hardship would be caused to the displaced Moorgate passengers between the closure date and the introduction of Thameslink 2000 services, by virtue of having to interchange at Farringdon with construction work in progress, without the benefit of the improved facilities there, and without the benefit of the more comfortable Thameslink service by way of compensation.**

10.9 **Hardship would be caused to the other users of Farringdon station between the closure date and the introduction of Thameslink 2000 services, by virtue of having the displaced Moorgate passengers additionally using the station with construction work in progress, without the benefit of the improved facilities there, and without the benefit of the more comfortable Thameslink service by way of compensation.**

10.10 **Particular hardship would be caused to**

**(a) the displaced Moorgate passengers, and**

**(b) the other users of Farringdon station,**

**if any part of the SPMR blockade occurs after the closure took place. This would be due to the extra pressure on the station during that period.**

10.11 **The hardship would be ameliorated by planning in order to mitigate the disruption as far as reasonably possible. The planning should take place before construction works begin, in order to avoid problems rather than treat them reactively once they happen. [To be carried out by Railtrack and the train and station operators concerned, at an early stage in the detailed planning of the works.]**

10.12 **Any closure consent should be made conditional on the Regulator being satisfied that an adequate strategy is in place to manage passenger flows at Farringdon, and passengers who could usefully avoid the area, during the various stages of construction work and the different train service patterns at various stages. This strategy should particularly address passenger information, accessibility, personal security, staffing and ticketing issues.**

[84] Document M, item 16

# 11

## Conclusions and recommendations: possible economic hardship

11.1 A few objectors had suggested that the closure would cause economic hardship to the City of London[85]. This would be because the City's accessibility, and hence its competitiveness, would be reduced. The Corporation of London referred[86] to the current and increasing importance of the Moorgate catchment area for employment in the City and in the City fringe areas. It felt that there would indeed be an economic cost, but that in the overall context of City employment the cost would not be substantial.

11.2 The Committee believes that, given the wide variety of transport corridors to and from the City, any economic cost as a result of the closure would not be significant, and in any case that cost might not translate into tangible effects. Accordingly, there would be no hardship.

11.3 A few objectors had suggested that the closure would reduce house prices in St Albans[87]. The Committee believes that Thameslink 2000 as a whole is likely to be either neutral or beneficial to St Albans (and, indeed, to similar locations), that many other local factors could equally affect house prices, and that in any case loss of property value would not necessarily cause hardship. Accordingly, there would be no hardship.

[85] Document M, item 28
[86] Meeting on 3/5/6 April, Minute 24
[87] Document M, item 39

# 12

## Advertising of the closure proposals

12.1 The Committee had been concerned about the SSRA's initial approach to advertising the closure proposals[88]. The decision not to put up notices at stations, although legal, went against custom and practice. The SSRA reacted well to these concerns, by seeking to put up posters at all stations with direct trains to the stations concerned, and extending the period for objections accordingly.

12.2 There were initially some difficulties with this; some stations required some prompting, and at others the poster was in an insufficiently conspicuous location – in one case, quickly rectified, on a disused platform. The SSRA has no power to require these posters to be displayed, and is dependent on the goodwill of the station operators concerned.

12.3 The Committee feels that such problems must be overcome, if passengers are to be given an opportunity for their views to be heard adequately. Informing local authorities and MPs is worthy, but the information does not often filter through to the passenger – as some of the objectors said[89].

12.4 The style of the posters also needs to be revised. They were hardly eye-catching, and were difficult to comprehend. Attention should also be given to how people who cannot see or read (or understand) posters could be better notified of the closure proposal.

**12.5 The current requirements for publicising closure proposals are inadequate. The industry and its regulators should consider how to improve on them – or, at least, improve on the steps taken in practice.**

12.6 The cost of improved publicity will be very small.

[88] Document S
[89] Document M, item 22