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Report by the
Comptroller and Auditor General

Shadow Strategic Rail Authority

Action to improve passenger rail services

HC 842 Session 1999-2000
3 August 2000

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John Bourn
Comptroller and Auditor General

National Audit Office
24 July 2000

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Executive summary

This report examines the challenges facing the new Strategic Rail Authority.

1 In November 1999, the government introduced legislation which is still going through Parliament to create a Strategic Rail Authority. However, the Authority has been operating in shadow form since July 1999. This report is about the challenges facing the new Authority in its task of improving passenger rail services. In considering these challenges, we have reflected on the experience of the Authority's principal predecessor, the Office of Passenger Rail Franchising (OPRAF).

OPRAF awarded and administered franchises with train operating companies to run passenger rail services.

2 The Railways Act 1993 established a new way of delivering passenger rail services in Great Britain. Under these new arrangements OPRAF, a non-ministerial government department, was given responsibility for awarding and then administering franchises with train operating companies to run passenger rail services. All 25 franchises were awarded by March 1997, with performance standards set at the levels achieved by British Rail before franchising. OPRAF monitored compliance with franchise conditions and paid (in most cases) subsidies to the train operating companies.

Each franchise is a legal contract …

3 Each franchise is a legal contract between the head of OPRAF, the Franchising Director, and the train operating company. The subsidy to the companies, which totalled £1.0 billion[1] in 1999-00, is set at the amounts agreed for providing the required services and is largely unaffected by company performance or compliance with the franchise, except in serious cases of failure. Failures of performance are dealt with through a graduated system of enforcement which is intended to seek restitution and remedy; and repeated or serious failures may lead to termination of the franchise. In addition, some aspects of performance lead to incentive or penalty payments, which amounted to a net £3.3 million in 1999-00 (comprising £25.6 million in penalties and £22.3 million in incentive payments). All train operating companies are also required to have a Passenger's Charter.

… with some years to run, although a replacement process is underway.

4 The existing 25 franchise agreements, with one exception, have another three or more years to run. However, in 1999, the Franchising Director began a process of inviting some train operating companies to voluntarily rebid for their franchise in competition with outside bidders. No franchise has yet been relet under these arrangements but the Authority would like to replace most existing franchises by 2002. It hopes, through this "replacement" process, to remedy shortcomings in the current franchise arrangements.

1 Train operating companies received a further £0.3 billion from Passenger Transport Executives which are not the subject of this report.

We consider what action the Authority needs to take to improve passenger rail services in the light of past experience and current problems.

5 In this report we examine the performance of passenger rail services since franchising; the action taken by OPRAF and the Authority to improve performance; and the obstacles which at present inhibit improvements to performance. We consider what action the Authority needs to take in the light of past experience and current problems. The report focuses on those aspects of passenger rail services with the potential to have made a significant difference to the quality of service received by passengers in the three years since OPRAF assumed responsibility. The regulation of Railtrack's performance in maintaining and renewing the railways is the subject of a parallel report (HC397, 1999-00).

Main findings

Punctuality and reliability

87 per cent of trains arrive within 5 minutes of schedule and 1.2 per cent are cancelled.

OPRAF applied the powers available to it …

6 Since franchising, the train operating companies have operated more trains than previously and punctuality and reliability have been slightly better than under British Rail. In the two years between April 1998 and March 2000, 87 per cent of trains arrived within five minutes of schedule and 1.2 per cent of trains were cancelled. However, different train operating companies are achieving significantly different levels of punctuality and reliability. The factors affecting performance are numerous and not all within the control of the train operating companies; but franchise arrangements were intended to incentivise train operating companies to make every effort to perform well themselves and to pressure other parties such as Railtrack and maintenance contractors to do so too. We found that OPRAF had applied the powers available within franchise agreements to remedy underperformance where it could. But we also identified some weaknesses.

… but these are subject to limitations.

- The incentive regime for punctuality, which rewards good punctuality and penalises bad, is the only mechanism available within franchise agreements to directly promote improvement beyond the standards set by British Rail. The regime applies to some companies only and is not thought to be very effective.

- The enforcement system has served to remedy very poor reliability, although it cannot bring about performance beyond the levels set in the franchise. Train operating companies with the least demanding performance benchmarks have found these standards relatively easy to meet, compared to those companies with tighter benchmarks.

- There is some evidence that the deterrent effect of enforcement action can influence companies to act in ways which are not in the best interests of passengers. Consultants employed by the Authority found that, for example, reluctance to cancel trains already running very late can cause increased disruption to timetabled services. The Authority has carried out extensive analysis on the effectiveness of its incentive and penalty regimes but has carried out no similar work on its enforcement regime or the Passenger's Charter, including the extent to which these various mechanisms may interact to bring about perverse behaviours.

The Authority has plans to strengthen incentives ...

7 The Authority published its guide to the franchise replacement process in January 2000. The guide announced a number of measures which the Authority will pursue through negotiations with bidders.

- The payment rates in its incentive regimes would be doubled and there would be greater penalties if punctuality falls below a minimum standard.

- Higher and common standards would be set for reliability related to the type of service, although some companies would be allowed a period of time to reach the new standards.

- A common national service guarantee would be required from train operating companies' Passenger's Charters.

The Authority stated that it will expect train operators to "build in sufficient resilience to their plans to deal with problems that are reasonably forseeable, such as staff shortages". It will also seek to build in review points every five to seven years to assess the franchisee's performance.

... but we believe it could go further.

8 We believe that these proposals will go some way towards addressing the current weaknesses in the Authority's influence over train operating company performance. However, **we make the following recommendations**:

- Punctuality should be brought within the terms of the enforcement regime, and common punctuality standards for inter-city and other train operating companies should be set, phased in over time as necessary.

- New franchises should include provision for all performance benchmarks to be raised through the life of the franchise to take account of infrastructure improvements, technological enhancements and other efficiency gains.

- The Authority should commission further work on the effectiveness of enforcement, including the extent to which it promotes perverse behaviour by train operating companies.

Passenger numbers, capacity and overcrowding

Growth in passenger numbers combined with limited capacity have caused increased levels of overcrowding.

9 Passenger numbers are growing fast in all areas of Great Britain. This growth has exceeded that predicted by the industry's existing forecasting models. Since franchising, almost all train operating companies have increased the services they offer but overcrowding, where it is measured, has also increased. The information currently available to the Authority on overcrowding lacks accuracy, frequency and completeness and there is limited scope within franchise agreements to address overcrowding. OPRAF applied its powers where it could to encourage train operating companies to provide agreed seat capacity, to ensure that companies placed their rolling stock where it was most needed and that they had plans to address overcrowding. However, the Short Formation Incentive Payment regime, which penalises train operating companies which fail to provide the required number of carriages on peak hour trains, appears to be more effective with some companies than others, probably because the penalty rates are not high enough.

Network capacity is the main factor limiting capacity.

10 The main cause of increasing overcrowding is the growth in the number of people travelling by train. Cancellations and failure to provide agreed seat capacity exacerbate the problem. But the main limiting factor is the physical capacity of the network, in terms of track and platforms. New rolling stock is therefore unlikely to do much to alleviate the overcrowding in London and the South East, and in any case most of the planned investment is to replace existing rolling stock.

The Authority needs better information on passenger growth and overcrowding, which it is trying to obtain.

11 The Authority is seeking to improve the information available to it on passenger growth and overcrowding. It has begun to analyse where passenger growth is occurring and why, and is developing more accurate ways of measuring passenger numbers. There are inherent difficulties in counting passengers disembarking from trains manually and the Authority is seeking to encourage train operating companies to adopt more accurate and flexible electronic systems.

It also has plans to increase capacity.

12 The Authority is trying to address the challenge of unanticipated passenger growth combined with the physical constraints of the network. In its guide to the franchise replacement process, it announced that it intends to introduce the following changes to new franchise agreements.

- The penalty rates for running trains with fewer than the agreed number of carriages would be doubled.
- More frequent and accurate recording of the number of passengers travelling on all services would be required.
- The Authority would consider adjustments to fares to encourage passengers to avoid the high peak.
- Companies would be allowed to raise fares, in some circumstances, to pay for capacity improvements after these have been delivered.

The cost and quality of passenger rail travel

OPRAF successfully contained fare rises ...

13 OPRAF was successful in containing average fares increases through its strategy of regulating key fares, although there are significant price differentials between regions for reasons which are largely historical, and some unregulated fares have risen by more than inflation. In particular, passengers in London and the South East pay more for key fares. In 1999, train operating companies agreed to keep average fares increases, both regulated and unregulated, below inflation.

... but the Authority intends to retain a fare adjustment mechanism which results in some passengers paying more.

We question the effectiveness and fairness of this mechanism.

14 In its guide to the franchise replacement process, the Authority has said that it proposes to continue to regulate key fares within an overall cap of RPI-1%, but changes to the cap will be considered where fares increases could be used to increase capacity or pay for "significant quality improvements". The Authority proposes to retain the fares adjustment mechanism for London commuter train operating companies. This mechanism allows fares to be raised for companies which improve punctuality and reliability compared to the previous year and requires lower fares increases for companies which perform worse. The fares adjustment mechanism is unpopular with train operating companies, whilst passenger groups consider that it rewards companies for performance which is still mediocre. There is a lack of evidence of its impact on performance. The Authority proposes to increase the effectiveness of the mechanism by removing the corresponding subsidy adjustment which compensates train operating companies for income lost because of performance-related fares adjustments. But this still leaves passengers in London and the South East paying more for improved punctuality and reliability, which they may not be inclined to do, particularly in the light of current levels of overcrowding.

OPRAF had little direct knowledge of the quality of service experienced by passengers ...

... and its attempts to raise passenger satisfaction had little impact.

15 OPRAF used surveys of passenger satisfaction to measure the quality of service experienced by passengers. It undertook very little direct verification of the services delivered, even for those aspects of service such as station standards which are spelled out in the franchise agreements, preferring to rely on self-certification by the train operating companies. Where OPRAF attempted to raise passenger satisfaction through action plans agreed with train operating companies, these have not had the desired effect of increasing satisfaction levels. The Authority has recognised that other factors may influence passenger satisfaction but has not discovered a way to allow for these other factors so that it and train operating companies can target their attention where it is most needed. The Authority is piloting 'mystery shopping', where customers are paid to record and report on the service they receive, on two companies. This may offer a viable, and relatively cheap, alternative approach, provided that train operating companies take action to address any shortcomings found.

In future, the Authority may introduce financial incentives and penalties linked to passenger satisfaction levels.

16 The Authority has told bidders for replacement franchises that it is intending to link the results from its national surveys of passenger satisfaction to an incentive regime. It has also set out a range of quality of service issues it wants bidders to consider in formulating their proposals, designed to improve passenger services and reduce the barriers to switching from car to public transport.

17 In addition to its current efforts to raise passenger satisfaction, **we recommend** that the Authority institute a programme of station inspections to determine whether standards laid down in the franchise agreements are being met. In doing so, the Authority should re-examine whether the currently defined station standards are sufficient to encourage meaningful improvements and, if necessary, revise the standards when negotiating new franchises. It should also consider whether the 'mystery shopping' approach could usefully be brought within franchise agreements so that train operating companies would have to take action in response to shortcomings it reveals.

Part 1: Introduction

What this report is about

This report examines the challenges facing the new Strategic Rail Authority.

1.1 In November 1999, the government introduced legislation to create a Strategic Rail Authority to provide a single body for "strategic planning, co-ordinating, and supervising the activities of the rail industry, and for the disbursement of public funds". A Transport Bill to create the Authority is still going through Parliament, although the Authority has been operating in shadow form since July 1999. This report is about the challenges facing the new Authority in its task of improving passenger rail services provided by the franchised train operating companies. In considering these challenges, we have reflected on the experience of the Office of Passenger Rail Franchising (OPRAF) which administered these franchises since they began in 1996-97 until the new Authority came into being.

How the new rail industry is organised and regulated

Privatisation brought new ways of delivering passenger rail services ...

1.2 The Railways Act 1993 established a new way of delivering passenger rail services in Great Britain. The main players in the provision of passenger rail services were:

three main providers of services

- 25 **train operating companies**, responsible for providing passenger rail services in Great Britain. The companies receive their income principally from fares revenue and subsidies paid by the Authority.
- **Railtrack**, which owns and operates the rail network infrastructure, including track, signalling, stations and depots. Railtrack receives its income from charges to the passenger and other rail companies which use the network.
- Three (now four) **rolling stock leasing companies**, which own the bulk of the passenger rolling stock and lease it to the train operating companies.

and two supervisory bodies

... in which OPRAF paid subsidies and oversaw the performance of train operating companies.

- **The Office of Passenger Rail Franchising** (OPRAF), a non-ministerial government department headed by the Franchising Director, which was responsible for awarding and then administering the franchises of the train operating companies. OPRAF monitored compliance with franchise conditions and paid subsidies to the train operating companies. Total net subsidies paid by OPRAF were £1.0 billion in 1999-00, and, on current plans, were expected to fall to £0.8 billion by 2001-02 and substantially thereafter.

- **The Office of the Rail Regulator** (ORR), an independent regulator which is responsible for granting licences to operate trains and the rail network; regulating access to the rail infrastructure and the charges which the train operating companies pay for its use; preventing anti-competitive behaviour; and promoting consumer interests and the benefits of an integrated network. The Rail Regulator also has a statutory duty to take safety into account in awarding licences, and may take enforcement action against Railtrack or the train operating companies if they breach the safety provisions in their licences. Lead responsibility for rail safety lies with the Health and Safety Executive.

In addition, in seven metropolitan areas, Passenger Transport Executives also pay subsidy (£0.3 billion in 1999-00) to train operating companies in return for the provision of local train services. The industry, and the activities and effectiveness of the two supervisory bodies, are overseen by the Department of the Environment, Transport and the Regions (the Department) on behalf of the Secretary of State.

The government intends to create a new Strategic Rail Authority ...

1.3 The division of responsibilities between the two supervisory bodies was not clear cut. In 1997, the new government announced its intention to create a Strategic Rail Authority and it carried out a review of rail regulation. The review concluded that there was confusion about the respective roles of the two bodies, especially in relation to passengers' rights. Figure 1 shows the main duties and powers proposed for the new Authority.

The main duties and powers proposed for the Strategic Rail Authority

Figure 1

The Strategic Rail Authority will have a broader remit than OPRAF and enhanced powers.

Duties

- to promote rail use for both passengers and freight
- to plan the strategic development of the network
- to promote integration between different types of transport

Powers

- to give grants, loans or guarantees for any purpose relating to railway services, including the ability to pay money direct to Railtrack
- to take over a franchise in defined circumstances
- enhanced powers to impose financial penalties on train operating companies for breaches of the franchise

Source: National Audit Office

… to take over from OPRAF.

1.4 The new Authority will, on its creation, subsume OPRAF in its entirety and those functions of the independent rail regulator, including passenger representation, which relate to customer benefits. It will also take over the functions of the British Railways Board which include responsibility for non-operational railway land and the British Transport Police, and take responsibility for freight from the Department. Pending new legislation, the Authority has been operating in shadow form since July 1999, using OPRAF's and the Board's existing powers.

1.5 In the rest of this report, we use 'Authority' to denote both the shadow and the future Authority. We use 'OPRAF' in relation to events before July 1999, when the Authority commenced operations.

OPRAF's and the Authority's approach

OPRAF awarded franchises and set franchise terms …

1.6 When the rail industry was privatised the previous government acknowledged that passenger rail services were likely to need long-term government support. Whilst rail assets were sold, the rights to run passenger services were franchised in return for subsidies that were expected to reduce over time and in some cases be displaced by payments to the Exchequer. Between February 1996 and March 1997 OPRAF awarded franchises to 25 companies to provide passenger rail services for periods of between 5 and 15 years (Appendix 1 provides basic information about the franchises). In October 1996 we examined the award of the first three passenger rail franchises (HC701, 1995-96).

… including mechanisms to supplement market forces where these are weak.

1.7 In establishing each franchise, OPRAF negotiated the level of subsidy to be paid over the life of the franchise and set the levels of performance which would be expected. In establishing the new rail industry, the government at that time wanted to allow market forces to operate as far as possible. Where market forces were considered to be weak, these were to be supplemented by a system of franchise enforcement and financial penalties and incentives.

The Secretary of State set OPRAF and the Authority new objectives …

1.8 Prior to 1997, the Secretary of State's objectives for OPRAF focused on its then task of awarding the franchises to run passenger rail services. In November 1997 the Secretary of State issued new objectives, instructions and guidance for OPRAF. OPRAF was expected to:

- increase the number of passengers travelling by rail;
- manage existing franchises in a manner which promoted the interests of passengers; and
- secure a progressive improvement in the quality of railway passenger and station services.

… which made passenger interests the top priority.

The new objectives made it clear that the top priority was to protect the interests of passengers. OPRAF's statutory and other objectives are shown in full at Appendix 2. The Authority was given these same objectives when it began operating in shadow form in 1999.

The Authority has a number of means to achieve these objectives.

1.9 To achieve these objectives the Authority, and previously OPRAF, monitors and enforces compliance with franchise terms, administers incentive and penalty regimes, seeks voluntary agreements with the train operating companies, and renegotiates franchise terms when opportunities arise. In addition, the Authority has a wider responsibility to monitor and report on the performance of passenger rail services.

Negotiations to extend or award new franchises provide an opportunity to remedy weaknesses in the current arrangements.

1.10 The existing 25 franchise agreements, with one exception, have another three or more years to run. However, in 1999, the Franchising Director began a process of inviting some train operating companies to voluntarily rebid for their franchise in competition with outside bidders. No franchise has yet been relet under these arrangements but the Authority would like to replace most existing franchises by 2002. It hopes that through this "replacement" process it can remedy shortcomings in the current franchise arrangements.

1.11 The Authority, at 1 April 2000, had 235 staff, based in London, and in 2000-01 is expected to cost around £20 million to run. It has six directorates including franchise management, railway development and strategy and planning. The largest number of staff are in the franchise management directorate.

How franchises work

Each franchise is a legal contract.

1.12 Each franchise agreement is a legal contract between the Authority and the franchise holder. The main components of each franchise agreement which relate directly to passenger services are set out in Figure 2.

Figure 2

The main components of franchise agreements

Franchise agreements set out train operating companies' responsibilities.

A **passenger service requirement** which sets out the services which the train operating company must plan to provide in the timetable of rail services it agrees with Railtrack.

A **train plan** sets out the train formation and seat capacity to be provided for certain services where the provision of capacity is deemed essential (typically commuter services).

Provision for **incentive and penalty regimes** which reward or penalise good or poor performance in respect of punctuality, reliability and train capacity. Punctuality and reliability are measured in relation to the timetable, and capacity is measured in relation to the train plan. Train operating companies receive penalties and incentives for performance failures or successes, regardless of cause, and a separate regime allows the companies to pass on a share of the penalties to Railtrack for lateness or cancellations due to failure of the network infrastructure.

Provision for the **regulation of fares**, which allow the Authority to limit increases in certain fares.

Requirements relating to **other aspects of passenger service**. All train operating companies are required to carry out customer satisfaction surveys and meet minimum station standards. In addition, franchise plans record commitments for the improvement of services through new investment.

Source: National Audit Office

All these aspects are open to amendment and addition throughout the life of the franchise, but only with the consent of both the Authority and the franchisee and, where appropriate, a Passenger Transport Executive.

Failure to perform …

1.13 Payments to train operating companies are usually made at the end of each four-weekly period. Failure to perform or deliver franchise commitments affects the payments made to operators in different ways:

… does not in general affect the subsidy paid …

- Subsidies, representing around 98 per cent of the sums paid to the train operating companies, are not directly affected by the company's performance unless that performance is very poor. Most of the subsidy payment is fixed, although there are small adjustments. In 1999-00 fixed subsidies totalled £1.0 billion, and were subject to adjustments with a net value of £3.5 million (gross total £4.3 million).

… but may lead to financial penalties …

- Penalty and incentive payments are related directly to levels of performance for some aspects of service, most notably punctuality and reliability. In 1999-00, penalty payments to OPRAF were £25.6 million, and incentive payments to the train operating companies totalled £22.3 million.

… or graduated enforcement action.

1.14 The franchises also provide for graduated action in response to failure to meet performance standards or franchise conditions.

- Some failures result first in a "call-in" in which the train operating company is invited to explain how the failure occurred.

- Other failures or repeated call-ins may lead to a formal "breach" of the franchise agreement, and companies must present proposals for remedy including, if appropriate, compensatory benefits for passengers.

- If failure persists, statutory enforcement powers allow the Authority to issue a provisional and then final enforcement order, before terminating the franchise if the failure is not put right. A provisional order may threaten a fine, and if the company does not comply then the fine is levied as part of a final enforcement order.

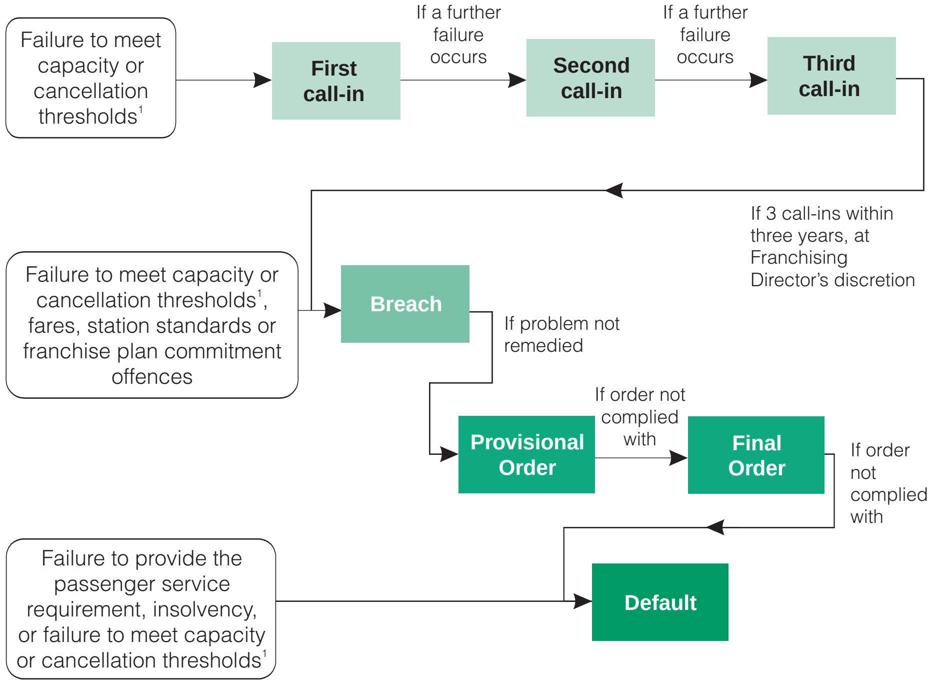
- If the final order is not complied with, or there is a yet more serious failure, the Authority may hold the company in default and terminate the franchise. Only then would subsidy payments be withheld.

This system of graduated enforcement is shown in Figure 3. The thresholds for performance which determine whether call-in, breach or default is appropriate were generally established by OPRAF when the franchises were let.

Figure 3

The enforcement action available to OPRAF and now the Authority

OPRAF and now the Authority operate a graduated system of franchise enforcement.



Note: 1. Too many cancellations or providing too few seats in a four-weekly period may lead to call in, breach or default, depending on the severity of the failure. Franchise agreements specify the thresholds which trigger each level of enforcement.

Source: National Audit Office

1.15 Franchise agreements require all train operating companies to have a Passenger's Charter as a means of compensating passengers for poor performance. The companies decide the terms of their Charters themselves and employ Sheffield University to supervise their compliance with those terms. The Authority can take enforcement action in the event of non-compliance.

1.16 The degree to which different aspects of train operating company performance are subject to incentives and penalties or enforcement action is shown in Figure 4. The incentive regimes are intended to supplement market forces where these are weak - typically on commuter services where passengers have little choice but to use rail and low revenue regional services. In addition, there is a fares adjustment mechanism which applies to some of the companies subject to incentive regimes. The mechanism allows fares to be raised for better punctuality, reliability and capacity and lowered for worse performance. It is linked to a compensating subsidy adjustment (the Fares Incentive Adjustment Payment) which removes the effects of performance-related fares increases or decreases from train operating companies' revenue.

Figure 4

Service aspects covered by the Authority's incentive regimes and enforcement powers

Some service aspects may lead to a breach of the franchise, others lead to penalty or incentive payments.

Aspect of service	Enforcement	Incentive regimes	Detail of incentive regimes		
			Regime	Type of service included	Proportion of all services included
Punctuality	✗	✔	*Punctuality Incentive Payment[1] and Timetable Change Incentive Payment*	*London peak and most regional services*	*60%*
Reliability	✔	✔	*Punctuality Incentive Payment[1] and Timetable Change Incentive Payment*	*London peak and most regional services*	*60%*
Capacity	✔	✔	*Short Formation Incentive Payment*	*London peak and some Scottish and Welsh services*	*15%*
Overcrowding	✔[2]	✗			
Fares	✔	✗			
Passenger satisfaction	✔[3]	✗			
Other franchise commitments	✔	✗			

Notes: 1. For London commuter companies only, performance under the incentive regimes is linked to a fares adjustment mechanism and subsidy adjustment (the Fares Incentive Adjustment Payment); such that good performance leads to a greater than average allowable fares increase in the following year and vice versa for poor performance.

2. Train operating companies cannot be held in breach for exceeding overcrowding limits but are required to have plans to try to avoid overcrowding.

3. Powers limited to enforcement of agreed action plans for poor passenger satisfaction.

Source: National Audit Office

Scope and methods

1.17 This report is about the challenges which face the new Authority in its key task of securing an improvement in passenger rail services whilst protecting the interests of passengers. Each Part of the report describes the performance of the passenger rail industry since franchising in relation to different aspects of passenger rail services:

- punctuality and reliability
- passenger numbers, capacity and overcrowding; and
- the cost and quality of passenger rail travel

In each Part we highlight those aspects which most need improvement; the action taken by OPRAF and the Authority to improve performance; and the obstacles which at present inhibit improvements to performance. We consider what action the Authority needs to take in the light of past experience and current problems.

This report focuses on quality of service. Railway infrastructure issues are covered in a parallel NAO report.

1.18 The report focuses on the quality of service received by passengers on franchised services (ex-British Rail services) and does not include Eurotunnel or light rail services. Our examination did not extend to the responsibilities and actions of the Passenger Transport Executives which are subject to local authority control. The regulation of Railtrack's performance in maintaining and renewing the railways is the subject of a parallel report (HC397, 1999-00). The National Audit Office does not have audit access to the train operating companies or Railtrack, which limited our ability to undertake an independent examination at first hand of the factors which underlie reported performance.

1.19 The Committee of Public Accounts reported on OPRAF's management of franchises in July 1998 (HC625, 1997-98). That report principally addressed the reliability of the systems used by OPRAF to make payments to train operating companies and manage the franchises.

1.20 The main methods used in our investigation were:

- analysis of train operating company performance data from OPRAF and the Authority;

- analysis of data on the performance of passenger rail services from other sources including the Department and the Office of the Rail Regulator;

- interviews and discussion with OPRAF and Authority staff, including franchise managers, and scrutiny of franchise management files;

- consultations with passenger representatives, lobby groups, train operating companies and the Association of Train Operating Companies (ATOC); and

- assistance from a panel of expert advisers.

Our methods are described in more detail in Appendix 3.

Part 2: Punctuality and reliability

Performance since franchising

Passenger's Charter data suggest that punctuality is better than under British Rail.

2.1 Before October 1997 the only data available on the lateness of trains were those recorded for the Passenger's Charter (shown at Figure 5). However, the Passenger's Charter was designed as a compensation mechanism and there are some inherent weaknesses in using Charter data and standards for reporting performance, the main ones being:

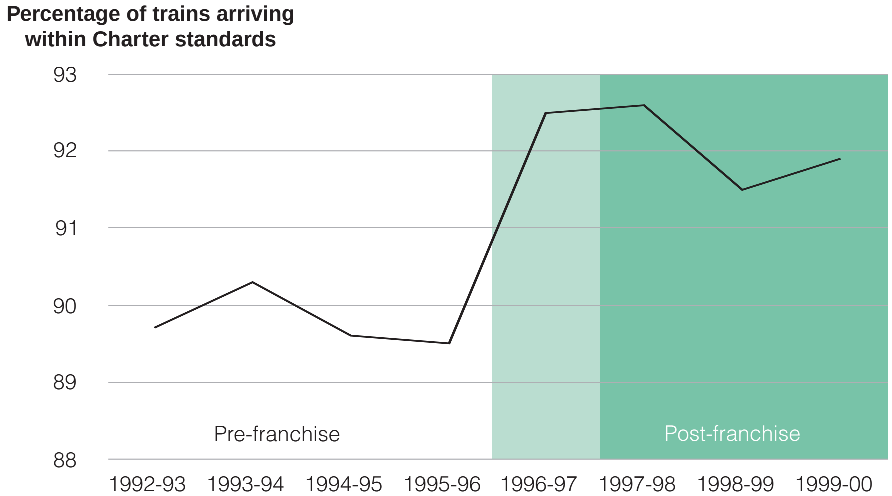
- not all trains are included, the main exclusions being most off-peak trains in London and the South East and weekend trains; and
- train operating companies can exclude days on which performance was very bad from the statistics by declaring them "void" and paying compensation to passengers.

Passenger's Charter data suggest that punctuality is better than under British Rail. It improved after franchising but has deteriorated since.

Punctuality against Passenger's Charter standards

Figure 5

Passenger's Charter statistics show that punctuality peaked in 1997-98 but remains better than performance in the early 1990s.



Note: To meet the Passenger's Charter punctuality standard, inter-city trains must arrive within 10 minutes of their scheduled time (10 minutes 59 seconds before April 1995) and all other trains must arrive within 5 minutes of their scheduled time (5 minutes 59 seconds before April 1995).

Source: DETR Bulletin of Rail Statistics

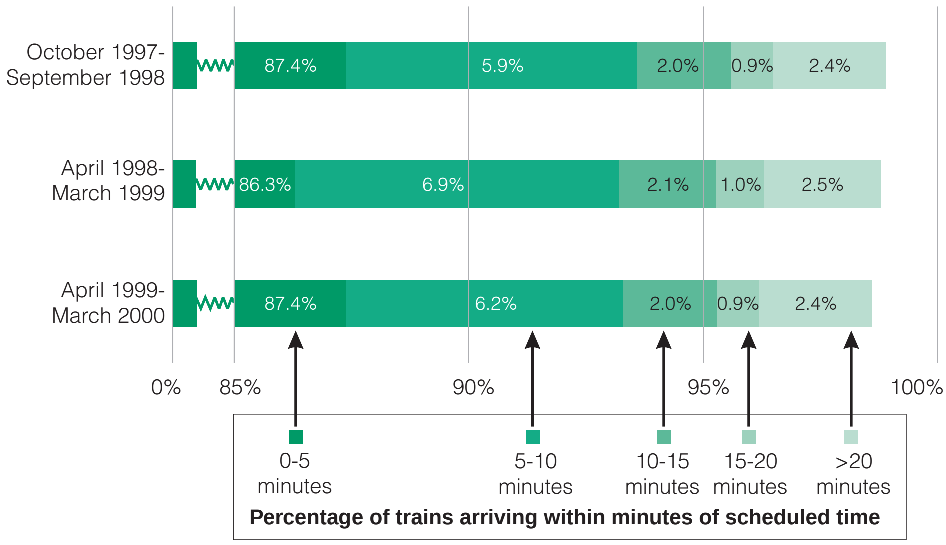
More comprehensive analysis shows that around 87 per cent of trains arrive within 5 minutes of schedule.

2.2 From October 1997, OPRAF collected and analysed data on the lateness of all passenger trains in order to develop a new performance measure for punctuality. These data show that, in 1999-00, almost two thirds (63 per cent) of all trains arrived on time whilst 87.4 per cent arrived within five minutes of their scheduled arrival time, a worse picture than that presented by Passenger's Charter data which shows over 90 per cent of trains arriving within 5 or 10 minutes of their scheduled time. Figure 6, based on the new measure, shows that in the two years between April 1998 and March 2000, one in 18 trains was 10 or more minutes late, but fewer than one in 40 was over 20 minutes late. Over the period punctuality changed little.

Figure 6

Punctuality (all passenger trains) between October 1997 and March 2000

Over the two year period from April 1998 to March 2000 around 87 per cent of trains arrived within five minutes of schedule whilst five per cent of trains were more than 10 minutes late.



Source: Shadow Strategic Rail Authority

Note: Excludes cancellations

Around 1 per cent of services are cancelled.

2.3 In 1999-00, 1.2 per cent of all trains were cancelled (70,000 trains). There have been only slight changes in reliability over the last few years. For example in 1993-94, the last year under British Rail for which such data are complete, 1.3 per cent of all trains were cancelled. Data recorded for the Passenger's Charter also show little change (Figure 7).

In 1999-00, another 1 per cent of trains failed to make all their scheduled stops, an increase over previous years.

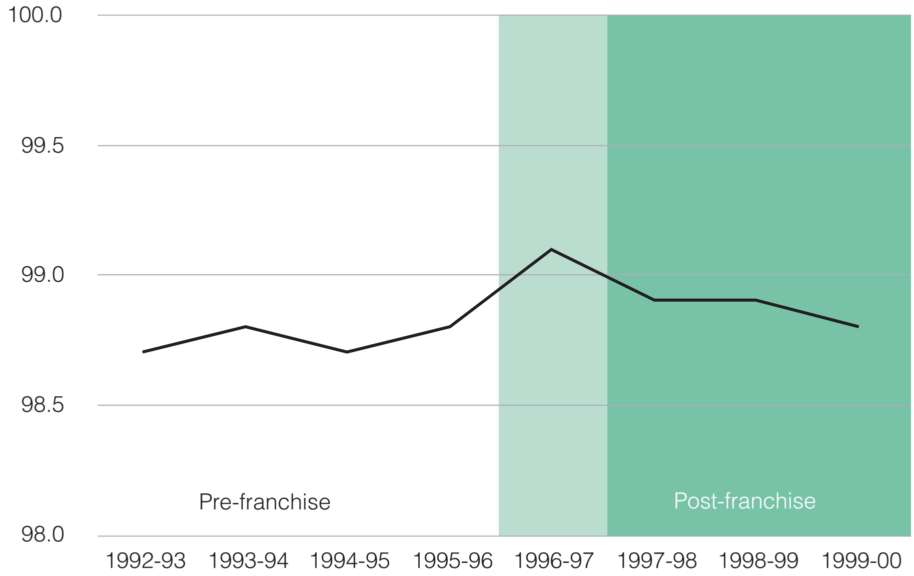
2.4 A cancelled train is one which does not start or fails to complete at least 50 per cent of its journey; a train which fails to complete its entire route, including stopping at all stations, is deemed a "partial cancellation". Data on partial cancellations under British Rail are not available. However, since franchising, partial cancellations rose from 40,500 in 1997-98 to 65,000 in 1999-00, around 1.1 per cent of all services, and an increase of 60 per cent.

Reliability against Passenger's Charter standards

Figure 7

Reliability has shown little change since the early 1990s.

Percentage of trains run



Source: DETR Bulletin of Rail Statistics

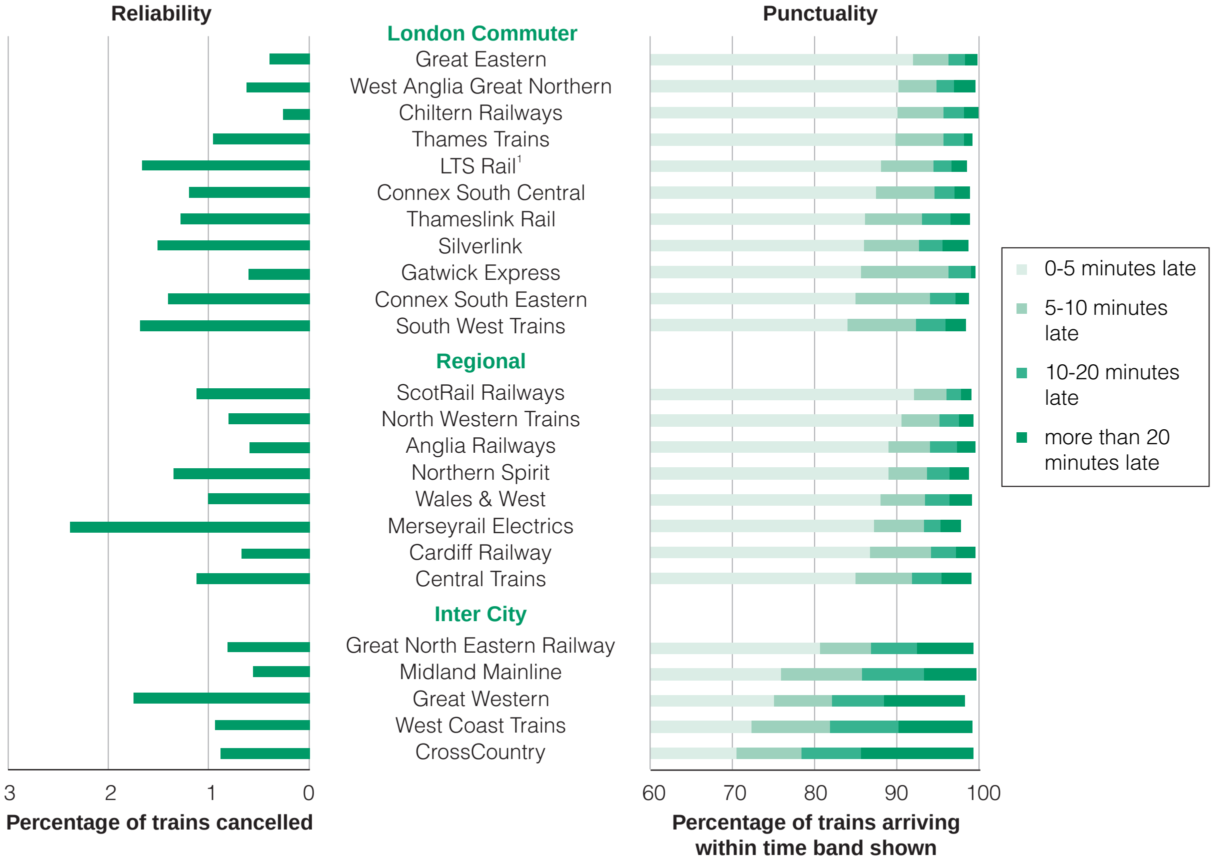
Punctuality and reliability vary widely between train operating companies.

2.5 Punctuality and reliability vary widely between train operating companies. Figure 8 shows the punctuality and reliability achieved by the train operating companies in 1999-00 for all passenger trains. Appendix 4 shows the performance of train operating companies across a range of measures, including punctuality and reliability.

Figure 8

Punctuality and reliability by train operating company in 1999-2000

There are significant differences in punctuality and reliability between the train operating companies even within service type.



Note: 1. LTS Rail changed its name to c2c Rail in July 2000.
2. Data for Island Line trains are not available.

Source: Shadow Strategic Rail Authority

2.6 To some extent train operating company performance will reflect the type of service they offer. In particular trains which travel longer distances, such as inter-city trains, may be expected to suffer more delay than trains making shorter journeys. In 1999-00, the punctuality of train operating companies varied between CrossCountry's 70 per cent of trains arriving within five minutes of schedule and ScotRail's 92 per cent. The figures for reliability show a similar disparity with 2.4 per cent of Merseyrail Electrics services cancelled compared to only 0.3 per cent of Chiltern Railways services

There are no national standards or targets for punctuality and reliability.

2.7 All current standards and benchmarks for train operating company performance, in relation to punctuality and reliability, are based on the historical levels of performance achieved by British Rail on groups of routes. There are no national standards or targets. Only recently has the Authority stated publicly what the industry should be aiming to achieve in the future. In May 2000, it announced an 'aspirational' punctuality target of 15 out of 16 trains (94 per cent) to arrive within 5 minutes of schedule (10 minutes for long distance trains).

OPRAF action

Incentive and penalty payments

OPRAF applied financial incentives to some services ...

2.8 Some franchises provide for a Punctuality Incentive Payment which requires the company to pay the Exchequer for punctuality and reliability worse than the standard achieved by British Rail, with corresponding incentive payments for better performance. This incentive regime applies only to peak London commuter and most regional services. In 1999-00 net payments to train operating companies totalled to £4.8 million, comprising penalty payments to the Exchequer of £16.7 million and incentive payments to the train operating companies of £21.5 million. Earlier years show a similar picture. This net flow in favour of the train operating companies reflects the fact that performance is on the whole better than the benchmark set under British Rail.

2.9 A Timetable Change Incentive Payment regime penalises disruption caused by late changes to the advertised timetable which might otherwise be used to avoid penalties imposed under the Punctuality Incentive Payment regime for cancellations. Timetable change penalties totalled £3.0 million in 1999-00.

... however, payment rates may be too low to incentivise better performance.

2.10 Work done in 1999 by AEA Technology and London Economics on behalf of OPRAF compared punctuality and reliability incentives to company revenue and found that even if companies' trains were always punctual the maximum incentive payment would still represent only 2 to 3 per cent of revenue. The consultants also found that train operating companies considered that other forces (fares revenue, enforcement and franchise renewal) were more powerful motivators than the punctuality and reliability incentive regimes. This view was confirmed by the consultants' econometric analysis which examined the relationship between performance and a number of factors and found a "mainly insignificant" relationship between incentive payments and better performance. This weak relationship between incentives and performance might also reflect the fact that the rates of incentive payment were set to reflect the disbenefit to passengers caused by cancellations or lateness, and not the amount of investment that would be needed to secure improved performance; in other words, it may be cheaper for the company to pay the penalty than to fix the problem.

Enforcement action

Poor punctuality is not subject to enforcement action but poor reliability is.

2.11 Under the franchise agreements, the Authority has no power to require train companies to meet standards for punctuality, and thus it cannot take enforcement action for lateness. The Authority is, however, able to take enforcement action in response to excessive cancellations.

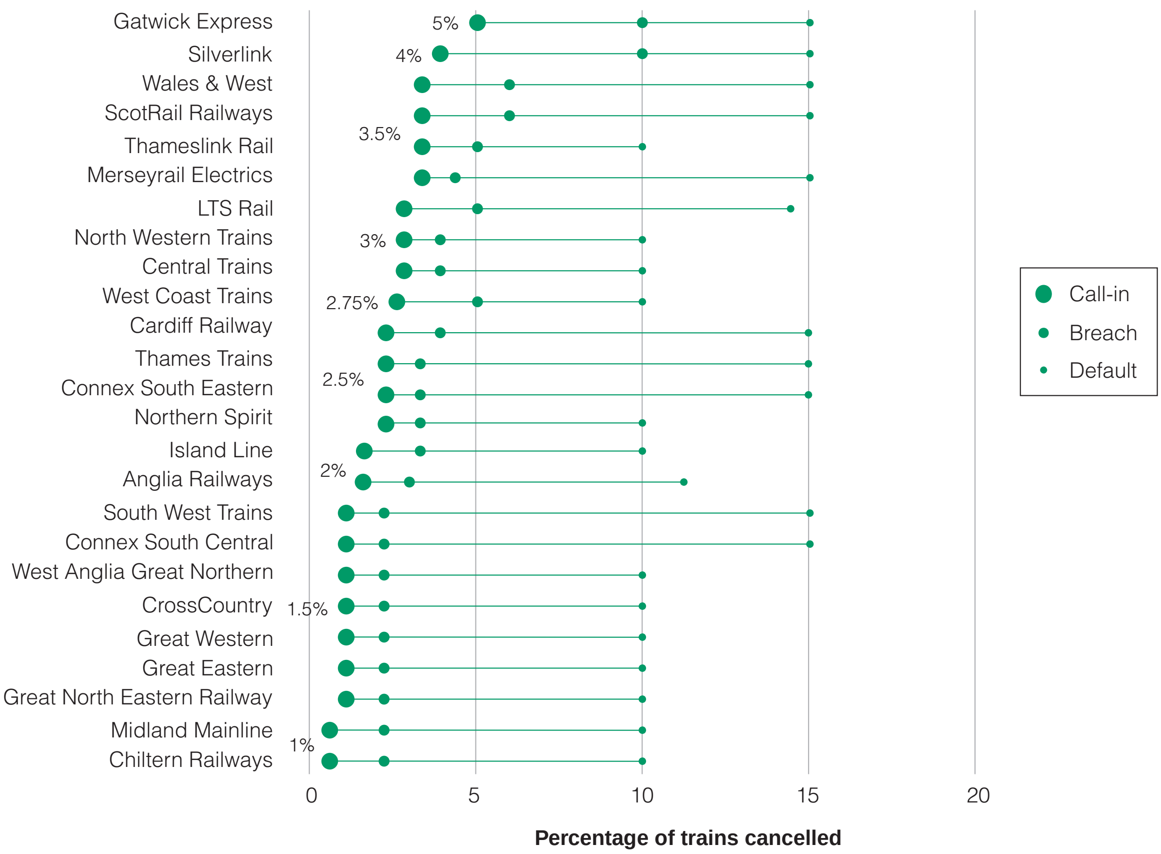
Standards set for reliability used British Rail performance as a benchmark resulting in widely differing standards …

2.12 OPRAF based the performance standards for reliability on the level of service previously provided by British Rail, such that a company equalling British Rail performance would be likely to be called in once a year and be in breach once every three years. Because British Rail performance was poorer on some services than others, the thresholds set for train operating companies differed widely (Figure 9).

Figure 9

Thresholds for enforcement action in relation to cancellations

Train operating companies have widely differing thresholds for enforcement action in relation to cancellations.



Source: OPRAF

… which cannot be changed during the life of existing franchises.

2.13 The data used to set thresholds were incomplete. In particular OPRAF did not have the data to take account of the likely effect of events of force majeure. Force majeure includes industrial action, security alerts and incidents which last more than 12 hours like signal failures, broken rails and suicides; and cancellations due to these events do not count towards breaches of the cancellations thresholds. As a result there has been less enforcement action than anticipated. OPRAF was also not able to establish call-in and breach thresholds for partial cancellations until 1998 because for the most part partial cancellations were not recorded under British Rail and hence the information on which to base thresholds was not available. In addition, there was no provision in franchise agreements to allow OPRAF, and now the Authority, to raise thresholds during the life of the current franchise, although thresholds could be revisited through voluntary renegotiation or when franchises were retendered.

OPRAF took action in relation to all the call-ins and breaches it was aware of …

… but has been inhibited by data problems.

2.14 Between franchising and June 1999, OPRAF called in 14 train operating companies on a total 27 occasions for poor reliability and took breach action against 7 companies[1]. In each case where it was aware that a threshold had been exceeded, we found that OPRAF invoked the action or sanction available to it. However, it relied largely on returns provided by train operating companies to identify when thresholds had been breached. OPRAF was unable to fully verify these returns against its computerised data extraction systems because these systems reported cancellations on a different basis to that used to determine call-in. A modified version of this computer system, due to be implemented in August 2000, should solve this problem. On one occasion, a company's reporting was found to be incomplete. OPRAF did not discover that Great Eastern was not including data on its Sunday trains in its reports to OPRAF until December 1998, nearly two years after the franchise was let. However, corrected backdated data supplied by the company shows that the call-in threshold was not exceeded during this period.

Nonetheless, OPRAF's enforcement action appears to have worked to bring performance back to the standard set …

2.15 Enforcement action may have both a direct effect and a deterrent effect. On the former, the graduated system of enforcement appears to be effective in bringing performance back to levels set in the franchise:

- whilst there had been 14 first call-ins for cancellations, only 6 of these were followed by a second call-in and only 3 of these were followed by further call-ins;

1 Since June 1999, the Authority has called in five companies on nine occasions for exceeding the call-in thresholds for cancellations. There have been no further breaches.

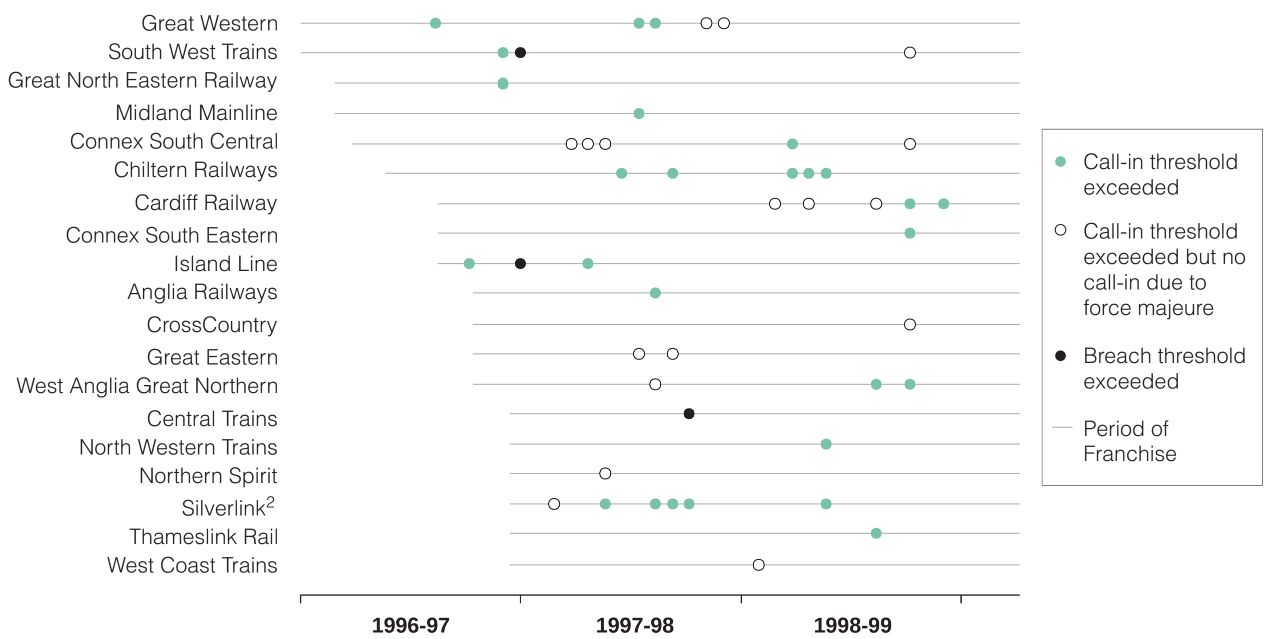
- of the 7 breaches for cancelling trains, only 1 was not immediately remedied and was followed by a Provisional Order, which was obeyed and a Final Order not required.

Figure 10 shows, for each train operating company, the number of four-weekly periods where cancellations exceeded call-in thresholds, including those discounted for force majeure.

Figure 10

Call-ins and breaches for cancellations between franchising and June 1999

Train operating companies have very variable records of performance against the call-in and breach thresholds for cancellations.



Notes: 1. Six train operating companies have not exceeded their call-in threshold for cancellations in any period since franchising.

2. Silverlink was set more stringent performance standards than British Rail performance. However its franchise agreement prevented call-ins before March 1998 from counting towards breach.

3. In addition to the breaches shown above two train operating companies were also held in breach for cancelling branch line services, even though they did not exceed cancellations thresholds.

Source: National Audit Office analysis of OPRAF data

... but the threat of enforcement for cancellations may on occasion harm punctuality ...

2.16 On deterrence, it is not possible to know for certain what would have happened without enforcement action, but consultants AEA Technology, undertaking work for OPRAF in 1999, found that the train operating companies considered that enforcement had been a powerful incentive to remedy poor performance. Indeed, the consultants found that enforcement was a powerful factor that in some cases had led to perverse behaviours: for example, companies had run trains very late to avoid breaching thresholds for cancellations, causing disruption to other services and the timetable.

... and cancellation thresholds for some companies may now be too low.

2.17 There is a strong relationship between the number of times thresholds have been exceeded and the performance standard set; tighter thresholds are more likely to be exceeded. For example, cancellation thresholds have been exceeded 4 times by the ten train operating companies with the least demanding thresholds, in contrast to 26 times by the ten companies with the tightest thresholds. This suggests that train operating companies are in general finding it easier to better British Rail standards for those services where performance was poorer, than to match standards where British Rail performance was better and that, in some cases, thresholds are now too low and need to be tightened.

Voluntary action

The success of voluntary action to address poor performance is not yet evident.

2.18 In Spring 1998 OPRAF called for an action plan from each train operating company to address poor punctuality and reliability. Each operator submitted a plan to OPRAF analysing the causes of poor punctuality and reliability and outlining a set of actions to address the problems identified. The plans were not contractually binding and OPRAF could not take enforcement action against any train operating company for failing to carry out any part of its plan. Although OPRAF found it difficult to monitor companies' progress against their plans, the Authority regards this as a successful initiative. It believes that the approach has brought greater senior management involvement in addressing day to day problems in some companies and the encouragement of closer working amongst train operating companies to identify best practice and solve common problems. In November 1998, OPRAF's initiative was largely superseded by the industry's national 10 point plan (Figure 11), a joint train operating company and Railtrack-led initiative to improve punctuality and reliability. It is too soon to judge whether either initiative has led to sustained improvement, although in the year that followed the industry plan the previous deterioration in punctuality was reversed.

Causes of delay and cancellations

Around 57 per cent of delay is attributable to the train operating companies.

2.19 Since 1996, Railtrack's share of delay to passenger trains has fallen whilst delay attributable to train operating companies has risen both as a proportion of all delay and in absolute terms (Figure 12). In 1999-00, around 57 per cent of all delay was due to the train operating companies and over 80 per cent of cancellations.

The industry's 10 point plan for punctuality

Source: Association of Train Operating Companies

Figure 11

The industry developed a plan to target poor punctuality and reliability in November 1998.

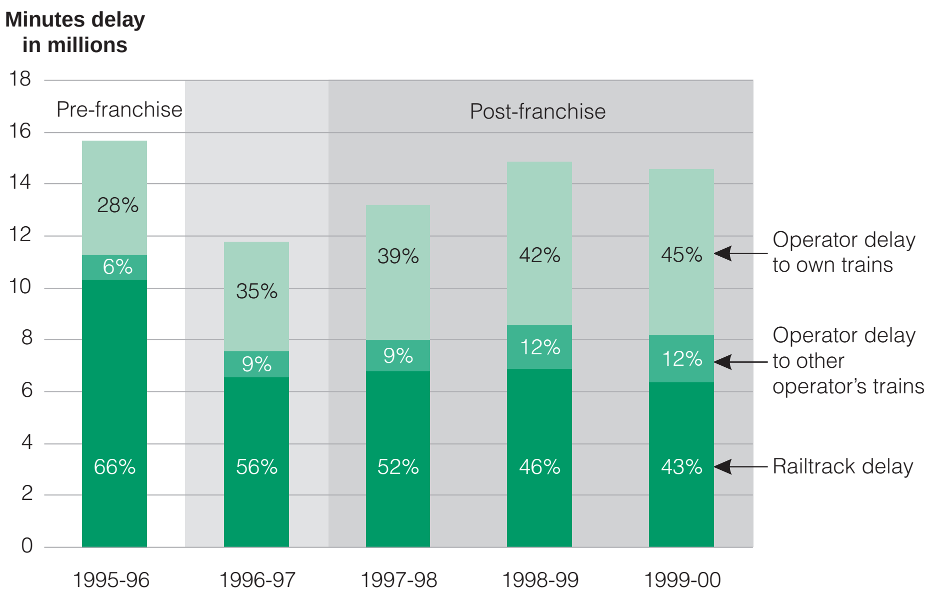
1. Establish a National Punctuality Task Force
2. Train 800 new drivers within 12 months
3. Target 50 worst delay hotspots
4. Introduce train reliability action groups to tackle mechanical breakdowns
5. Target track maintenance work on reducing delays
6. Work together on better timetable planning
7. Develop recovery plans for major disruption
8. Improve information to passengers on delays
9. Share plans with passenger groups
10. Tackle lack of capacity by investment

Delay to passenger trains, apportioned between Railtrack and train operating companies

Source: Railtrack

Figure 12

Delays due to Railtrack have remained broadly unchanged since 1996-97 whilst delays due to operators are rising.



Note: 1995-96 was the first year when delay was attributed to either operator or Railtrack. The train operating companies believe their share of delay in this year was greater than that recorded above.

2.20 Work carried out by AEA Technology for the Authority identified increased congestion on the rail network as a contributory factor to the steady increase in delay to 1998-99. Railtrack and train operating companies identified the following main causes of delay in 1999-00 accounting for around two thirds of all delay suffered; they are, in descending order of occurrence:

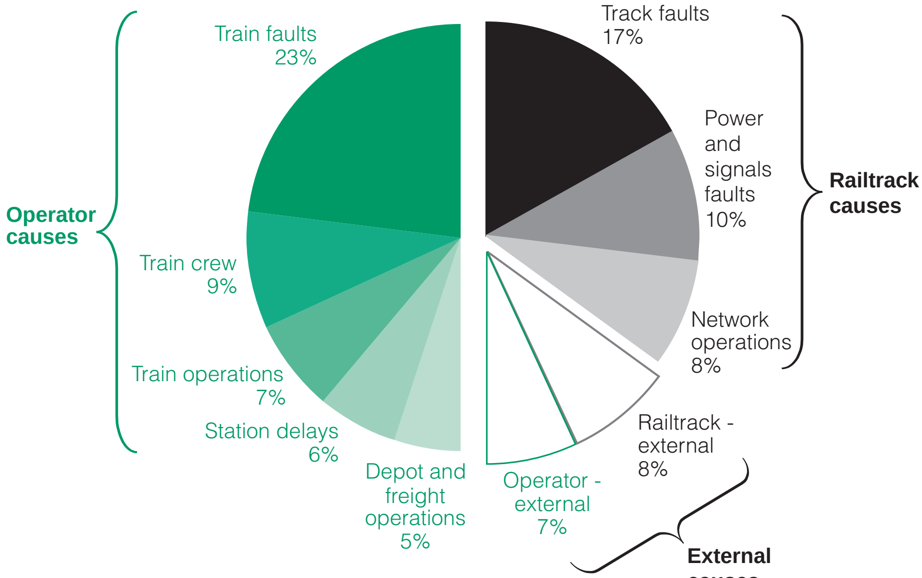
- track and signalling faults;
- train faults;
- shortage of train crew and train operation delays; and
- external factors, such as suicides, vandalism and extreme weather.

Track and signalling faults are the responsibility of Railtrack and are analysed in more detail in our report Maintaining and Renewing the Railways, (HC397, April 2000). Figure 13 provides a breakdown of the causes of delay in 1999-00. There is no comparable data available on the causes of cancellations.

Causes of delay in 1999-00

Figure 13

In 1999-00 breakdown and slow running due to poor rolling stock was the greatest single source of delay followed by track problems.



Source: Railtrack

Conclusions

2.21 Since franchising, the train operating companies have operated more trains than previously and punctuality and reliability have been slightly better than under British Rail. In the two years between April 1998 and March 2000, 87 per cent of trains arrived within five minutes of schedule and 1.2 per cent of trains were cancelled. However, different train operating companies are achieving significantly different levels of punctuality and reliability. The factors affecting performance are numerous and not all within the control of the train operating companies; but franchise arrangements were intended to incentivise train operating companies to make every effort to perform well themselves and to pressure other parties such as Railtrack and maintenance contractors to do so too. We found that OPRAF had applied the powers available within franchise agreements to remedy underperformance where it could. But we also identified some weaknesses.

- The Punctuality Incentive Payment regime, which is the only mechanism available within franchise agreements to directly promote improvement beyond the standards set by British Rail, applies to some companies only and is not thought to be very effective.

- The enforcement system has served to remedy very poor reliability, although enforcement action cannot bring about performance beyond the levels set in the franchise. Train operating companies with the least demanding performance benchmarks have found these standards relatively easy to meet, compared to those companies with tighter benchmarks.

- There is some evidence that the deterrent effect of enforcement action can influence companies to act in ways which are not in the best interests of passengers. Consultants AEA Technology found that, for example, reluctance to cancel trains already running very late can cause increased disruption to timetabled services. The Authority has carried out extensive analysis on the effectiveness of its incentive and penalty regimes but has carried out no similar work on its enforcement regime or the Passenger's Charter, including the extent to which these various mechanisms may interact to bring about perverse behaviours.

2.22 The Authority published its guide to the franchise replacement process in January 2000. The guide announced a number of measures which the Authority will pursue through negotiations with bidders.

- The payment rates in its incentive regimes would be doubled and there would be greater penalties for punctuality below a minimum standard.

- Higher and common standards would be set for reliability related to the type of service although some companies would be allowed a period of time to reach the new standards.

- A common national service guarantee would be required from train operating companies' Passenger's Charters.

The Authority stated that it will expect train operators to "build in sufficient resilience to their plans to deal with problems that are reasonably forseeable, such as staff shortages". It will also seek to build in review points every five to seven years to assess the franchisee's performance.

2.23 We believe that these proposals will go some way towards addressing the current weaknesses in the Authority's influence over train operating company performance. However we make the following recommendations:

- Punctuality should be brought within the terms of the enforcement regime, and common punctuality standards for inter-city and other train operating companies should be set, phased in over time as necessary.

- New franchises should include provision for all performance benchmarks to be raised through the life of the franchise to take account of infrastructure improvements, technological enhancements and other efficiency gains.

- The Authority should commission further work on the effectiveness of enforcement, including the extent to which it promotes perverse behaviour by train operating companies.

Part 3: Passenger numbers, capacity and overcrowding

Performance since franchising

Passenger numbers

There is, as yet, no common agreed way of measuring passenger numbers …

…but the Authority is working on a solution.

3.1 The Department, the Authority and the train companies all report information on the volume of passenger rail travel using different methods of compiling the figures and different bases of measurement, such as passenger numbers, passenger journeys or passenger miles. The Authority is working with the industry to agree common definitions for passenger use of the network and to identify an accurate method of calculation so that consistent information can be published in future.

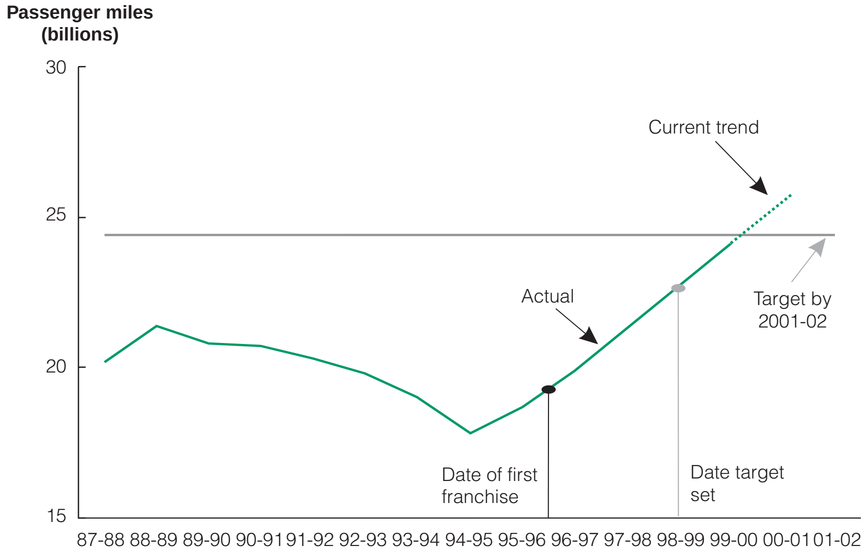
Between franchising and March 2000, passenger journeys rose by 24 per cent, …

3.2 Nonetheless, it is clear that, in recent years, passenger use of the rail system has grown significantly. In 1999-00 the train operating companies reported that passengers made 947 million journeys by rail, 100 million (and 12 per cent) more than two years previously in 1997-98. The Authority has carried out its own exercise to determine passenger growth. Using data based on ticket sales, which excludes free travel, it estimates that the number of journeys made by rail grew by 24 per cent in the four years between the letting of the first franchises in February 1996 and March 2000, with the number of miles travelled increasing by the same amount. This represents an annual growth of 5.6 per cent, compared to the rate of 3.5 per cent which is needed to meet the Government's target to increase passenger miles by 15 per cent between 1997-98 and 2001-02. Figure 14 shows the trend in the number of miles travelled by rail passengers over recent years.

Trend in rail passenger miles since 1987-88

Figure 14

At the current rate of growth the Department's target for passenger miles will be achieved.



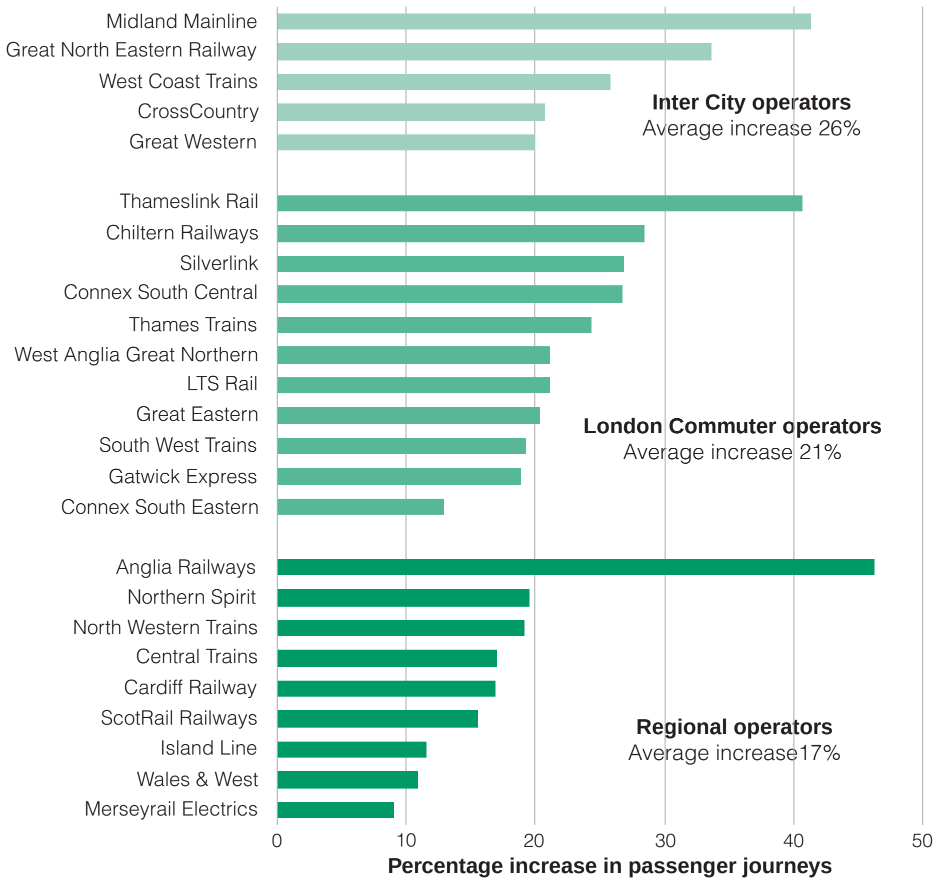
Source: DETR Bulletin of Rail Statistics

3.3 All train operating companies have recorded substantial increases in both the number of journeys made and the miles travelled on their services since franchising. Figure 15 shows that since 1996-97 all areas of Great Britain have experienced significant passenger growth; growth has been least strong in Wales, the South West of England, Merseyside and the Isle of Wight but has still been over three per cent a year in these areas. 21 out of 25 train operating companies have seen passenger growth of at least fifteen per cent between 1996-97 and 1999-00. The largest increase has been in the number of passengers travelling on inter-city services, 26 per cent over three years; followed by London commuter services with 21 per cent growth; and then regional services with 17 per cent growth.

Increase in passenger journeys between 1996-97 and 1999-00

Figure 15

Between 1996-97 and 1999-00, all train operating companies experienced substantial growth in the number of passengers using their services.



Source: Shadow Strategic Rail Authority

Capacity

... whilst the number of train services increased by seven per cent.

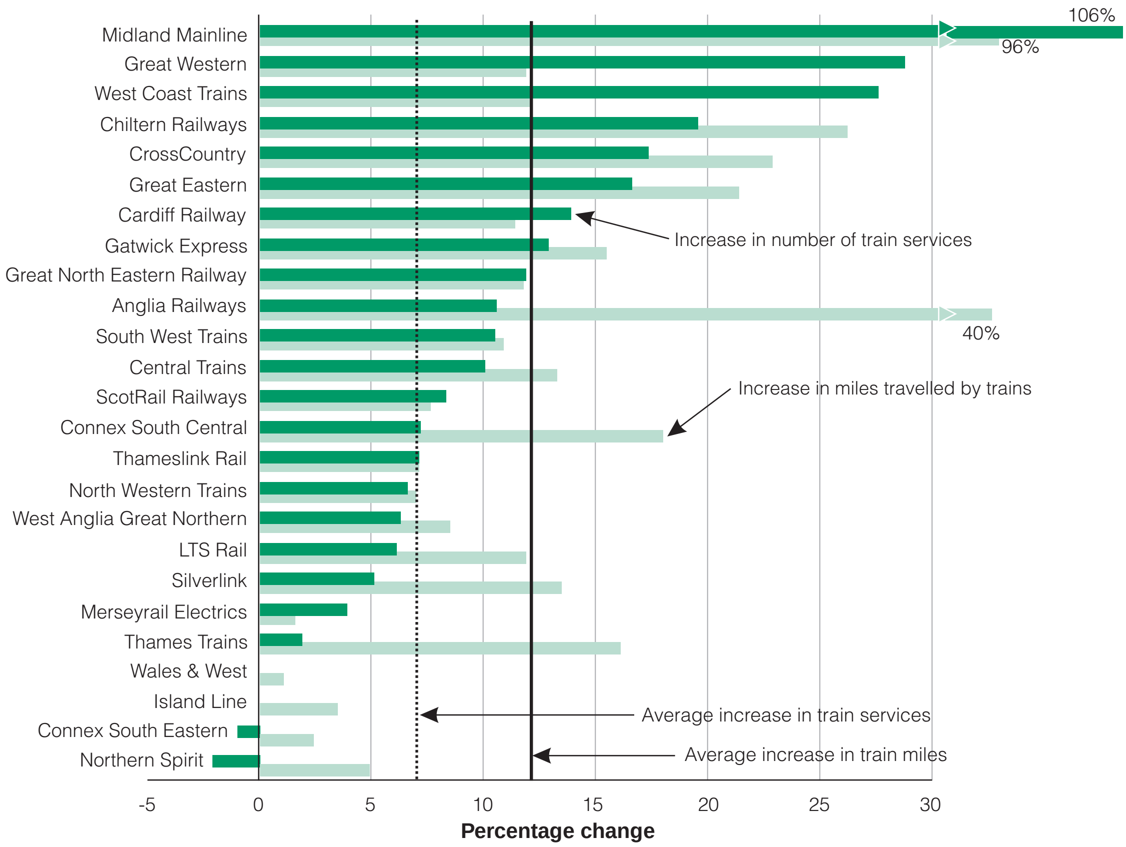
3.4 The volume of train services has also increased since franchising. Train operating companies have added around seven per cent more services to their timetables since 1996-7, or around 1,000 more services planned to run each day. In addition, total train mileage has increased by twelve per cent, because this greater volume of services has been accompanied by an average five per cent increase in journey length as operators have extended their routes. The Authority does not keep data on the extent to which the increase in services represents extra trains on existing routes or trains on new routes.

3.5 This growth in service capacity varies between train operating companies, with some companies increasing services by over 20 per cent and one company, Midland Mainline, doubling its planned services (Figure 16). Two train operating companies reduced planned services. In Northern Spirit's case, although it runs fewer services than before, this resulted from combining what were separate services into one service, for example by extending the Leeds to Carlisle service on to Glasgow. Connex South Eastern closed a branch line in preparation for the introduction of the Croydon tramlink service in 1997, but increased the number of planned services on other routes by 3 per cent.

Figure 16

Change in service capacity from franchising to March 2000

22 of the 25 train operating companies have increased their services since franchising, with some adding over 20 per cent more services.



Source: National Audit Office analysis of OPRAF data

Overcrowding

The measurement of overcrowding is infrequent, incomplete and not very accurate.

3.6 There are no national measures of overcrowding; franchise agreements only require overcrowding to be measured on commuter trains arriving in London between 7am and 10am and departing between 4pm and 7pm and, since 1998, on some Scottish commuter trains. Manual passenger counts are carried out once each year during the Autumn, the peak period for passenger rail travel. Each train is counted only once at the point of assumed maximum overcrowding, usually the

London (or Edinburgh) terminus. These counts are subject to considerable uncertainty; passenger numbers can vary by plus or minus 25 per cent on a daily basis, and the passenger counts of an individual train can be wrong by up to a further 5 per cent.

3.7 Companies are expected to limit overcrowding to 4.5 per cent in the morning or afternoon rush hour and 3 per cent averaged over both periods. To calculate overcrowding, the Authority compares the number of passengers in a carriage to its capacity. In addition to seat capacity, the Authority also makes an allowance for standing room for passengers whose journeys started within 20 minutes of the monitoring point. Thus, when passengers are counted at the monitoring point, assumptions have to be made about where the passengers boarded the train. Capacity limits are set for each type of rolling stock. A typical modern carriage has around 76 seats and standing room, as assessed by the Authority, for a further 28 passengers. Thus, on most suburban London commuter trains, 3 per cent overcrowding equates to around 31 passengers standing per carriage, 3 more than the combined seating capacity and standing room allowance for 104 passengers.

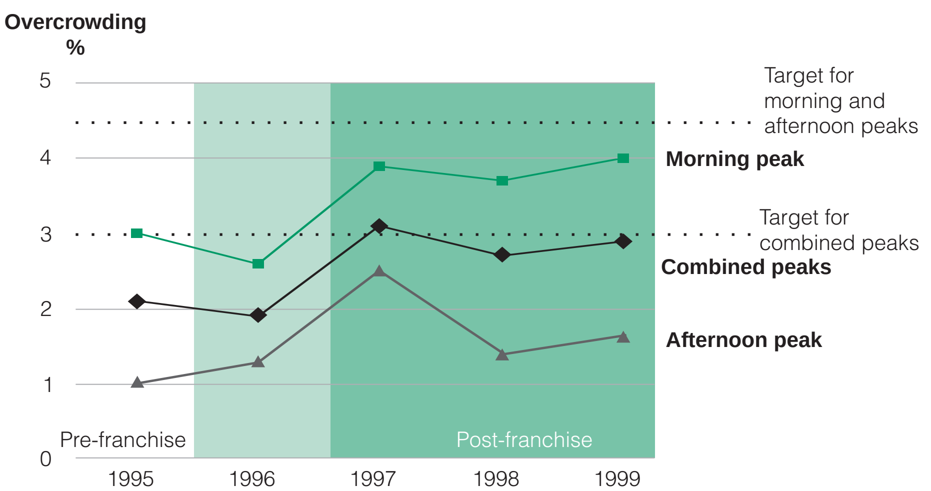
What is measured shows no clear trend in overcrowding on London commuter routes.

3.8 Subject to the caveats on data accuracy, overcrowding measured on London commuter trains has fluctuated. Whilst overcrowding has increased marginally since franchising, overall it remains just within the targets set by OPRAF (see Figure 17). The number of London commuter operators exceeding overcrowding targets rose from none in 1996 to five in 1997, fell back to two in 1998 but rose to four in 1999.

Overcrowding on London commuter routes, 1995-1999

Figure 17

Overcrowding on London commuter routes has fluctuated since 1995.



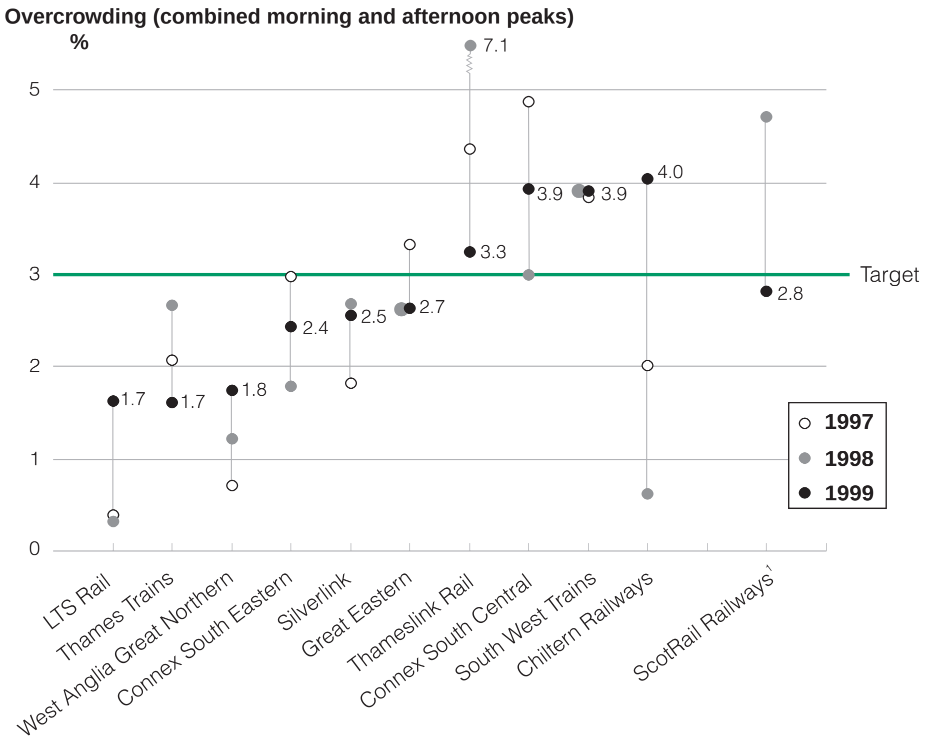
Source: OPRAF

3.9 Figure 18 shows the results of the passengers counts carried out for the ten London commuter train operating companies and ScotRail Railways since 1997; it shows no clear trend, with overcrowding getting worse on some companies' services and improving on others. In 1999, Chiltern Railways replaced Thameslink Rail as the company recording the most overcrowded services, with morning and afternoon overcrowding of 5.4 per cent and 2.0 per cent respectively. Overcrowding is almost always greatest in the morning peak because commuters tend to arrive for work at similar times, but travel home over a wider range of times. Figure 19 gives greater detail about overcrowding in 1999; it shows that three companies exceeded the targets for combined and morning peaks in 1999, Chiltern Railways, South West Trains and Connex South Central, whilst Thameslink Rail exceeded the target for combined peaks.

Overcrowding between 1997 and 1999, by train operating company

Figure 18

Between 1997 and 1999 overcrowding worsened on some operators' services, improved on others and changed little on yet others. There is no definite trend.



Source: Shadow Strategic Rail Authority

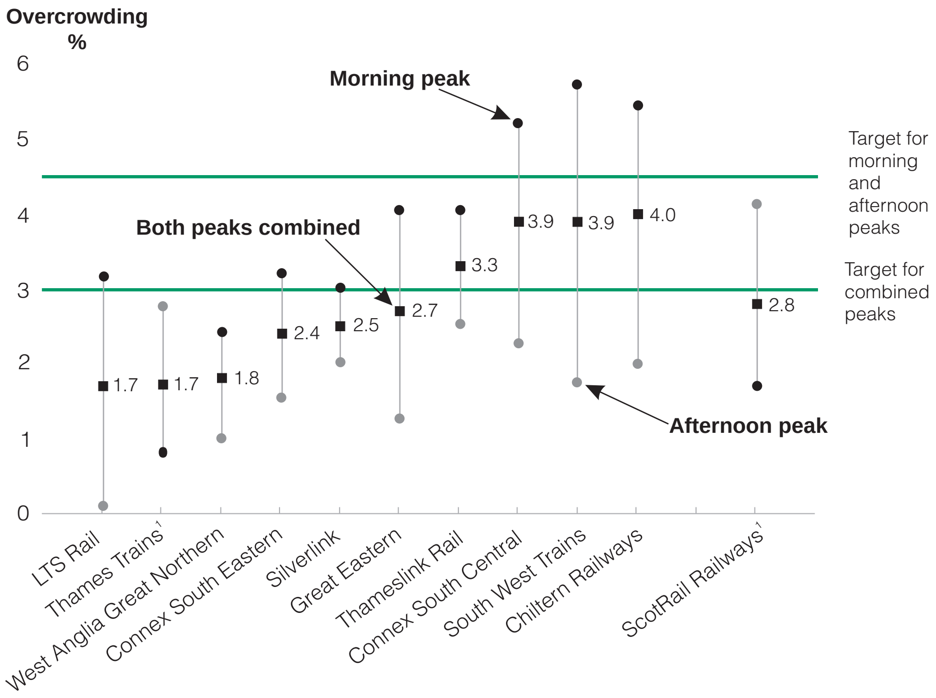
Note: 1. Overcrowding was first measured on ScotRail Railways in 1998.

3.10 Each company's figure for average overcrowding may conceal large differences between one route and another and between one train and another. In 1999, Connex South Central, South West Trains, Thames Trains and West Anglia

Overcrowding in 1999, by train operating company

Figure 19

In 1999, four train operating companies breached overcrowding targets and all eleven companies' commuter services were overcrowded to some degree.



Source: Shadow Strategic Rail Authority

Note: 1. For Thames Trains and ScotRail Railways, in 1999, the greatest overcrowding occurred in the afternoon peak.

Great Northern all recorded average overcrowding in excess of ten per cent on some routes - representing, on short journeys, about 38 standing passengers in a typical modern carriage.

OPRAF action

The Authority has a number of means to ensure that companies provide the agreed trains and seats ...

3.11 Franchise agreements allow OPRAF (and now the Authority) to take action on five fronts to ensure that train operating companies provide the agreed capacity and address overcrowding:

- any company which fails to plan to provide the services specified in its passenger service requirement can be held in breach of the franchise;
- the 21 train operating companies whose franchises include an agreed level of seat capacity can be called-in or held in breach if they fail to provide this capacity;

- a penalty regime, the Short Formation Incentive Payment regime, applies to 15 train operating companies: these companies must pay penalties if they provide too few carriages on peak hour trains;

- OPRAF (now the Authority) must approve train operating companies' train plans and can use this power to ensure that companies put carriages where they are most needed; and

- all train operating companies, not just those where overcrowding is measured currently, are required to make plans to address potential overcrowding problems.

3.12 We found that OPRAF had applied its powers of enforcement to deal with a lack of capacity and overcrowding where it could. It held three train operating companies in breach for minor infringements of passenger service requirements and has also called in six companies on a total of nine occasions for failing to provide the agreed number of seats.

3.13 Short Formation penalties totalled £3.5 million in 1999-00. For the ten London commuter train operating companies together with ScotRail Railways and Cardiff Railway, the proportion of peak hour trains which had too few carriages ranged between 4.4 per cent (LTS Rail) and 0.3 per cent (West Anglia Great Northern and Cardiff Railway), with an average of 2.1 per cent. OPRAF commissioned consultants AEA Technology to review the effectiveness of its incentive and penalty regimes in 1999. The consultants found that some train operating companies considered the Short Formation Incentive Payment regime a useful incentive to ensure high fleet availability, whilst others preferred to reduce their fleet and risk payments under the regime. The consultants did not undertake a statistical analysis of the impact of the Short Formation Incentive Payment regime on performance. However the payment rates under the regime are the same as those under the Punctuality Incentive Payment regime, which the consultants considered may be too low to have a significant effect on performance, at least in some train operating companies.

... but overcrowding is proving more difficult to address.

3.14 Overcrowding does not lead to enforcement action or penalties. However, companies that exceed overcrowding limits must put forward plans to reduce overcrowding. A company may be able to increase capacity by making better use of its existing train stock or by leasing more stock. However, if a train operating company is able to provide extra capacity only at a loss it can, following a feasibility study, ask the Authority (and previously OPRAF) to bear 80 per cent of the net loss.

The Authority weighs the benefits to passengers against the likely cost to the taxpayer before deciding whether to implement proposals put forward in a feasibility study.

3.15 In 1997, five train operating companies exceeded the overcrowding limit (see Figure 18). OPRAF assessed and agreed the companies' plans to reduce overcrowding which included, for example, changing stopping patterns, switching higher capacity stock to the routes of greatest demand and converting first class seats to standard. In three of the five cases, this action was successful in reducing overcrowding to acceptable levels, as measured by the passenger counts in 1998.

3.16 However, two train operating companies have now exceeded overcrowding limits for three successive years:

- in 1997, South West Trains leased more trains to reduce overcrowding. But, when the 1998 passenger count showed that overcrowding had worsened, the company was able to provide evidence from Railtrack that track capacity on the overcrowded routes had reached its limit. OPRAF saw no benefit in a feasibility study as it was not prepared to fund the large investment in track and platform capacity required to solve South West Trains' overcrowding problems. The Authority hopes to be able to address the issue of overcrowding on South West Trains' services through the replacement process. South West Trains and Railtrack are considering options for ways to increase capacity on routes into London.

- Thameslink remained above limits in 1998, and in Spring 1999 was asked to carry out a feasibility study, which is largely completed. Early results from the study, in July 1999, identified some extra capacity which Thameslink agreed to provide with financial support from the Authority. By Autumn 1999, measured overcrowding had fallen from 7.1 per cent in 1998 to 3.3 per cent, still over the target. The Authority is currently negotiating with Thameslink over new plans to reduce overcrowding.

3.17 In 1999, Chiltern Railways recorded excessive overcrowding for the first time. Chiltern considers that unrepresentative overcrowding on one train exaggerated the picture shown. The Authority suspects that passengers may have switched from Silverlink services onto Chiltern Railways, and asked Chiltern to carry out a further passenger count in May 2000 before deciding what action to take. Chiltern are due to bring ten additional carriages into service in Spring/Summer 2000 which the Authority believes will bring the overcrowding down to acceptable levels in the short term. In the case of the remaining company to exceed overcrowding limits in 1999, Connex South Central, the Authority is currently renegotiating the franchise with short-listed bidders. It has said that it is looking for investment to improve quality and meet predicted growth.

Causes of overcrowding

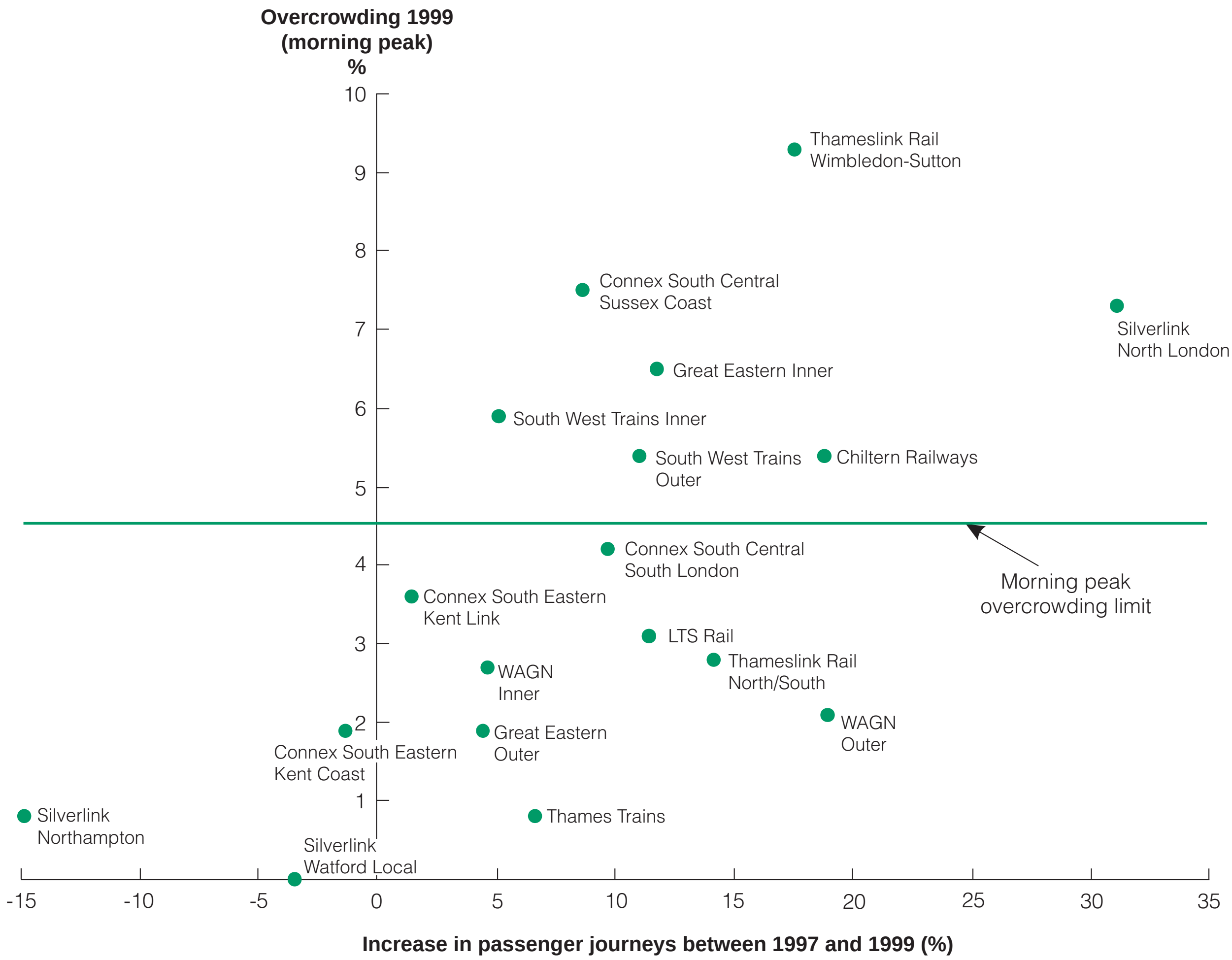
The increasing number of passengers is the main cause of worsening overcrowding …

3.18 Passenger numbers are growing faster than the increase in service capacity and our analysis shows this to be the main factor contributing to increased overcrowding. Whilst service capacity has increased by between seven and twelve per cent, passenger numbers have grown by 24 per cent. Figure 20, for example, shows that, in general, services with higher growth in passengers since 1997 were more likely to have overcrowding.

Figure 20

Relationship between the rise in passenger journeys and overcrowding

Routes with greater passenger growth tend to suffer worse overcrowding than routes with lower passenger growth.



Source: National Audit Office analysis of Shadow Strategic Rail Authority data

... and this growth may continue.

3.19 The current growth in passengers is unprecedented and outstrips that predicted by the industry's longstanding forecasting model. In 1999, the Association of Train Operating Companies, with support from Railtrack, commissioned a fundamental revision of the existing forecasting model. This work concluded that road congestion is the main factor turning falling passenger numbers into growth. Train operators believe that there has been a permanent change in passenger demand.

Shortfalls in seat capacity can exacerbate crowding levels.

3.20 Other factors also contribute to overcrowding. Overall, we found no significant relationship between overcrowding and a company's record in providing seat capacity or new services. However, on some services, cancellations and trains with too few carriages exacerbate existing crowding levels. We calculated that, in 1998, four train operating companies (Chiltern Railways, Connex South Eastern, LTS Rail and Silverlink) could have significantly reduced overcrowding on their services if they had provided 100 per cent of their agreed peak capacity. However, these companies' services were not as overcrowded as those of five other London train operating companies. Passengers using Connex South Central, Great Eastern, South West Trains, Thames Trains and Thameslink, would still have suffered high levels of overcrowding even if the companies had eliminated all shortfalls in seat capacity.

The limited capacity of the network is also a factor.

3.21 Nor, in the Authority's view, would more trains solve the problem without investment in railway infrastructure. The Authority has told us that, in general, where additional capacity is most needed the present infrastructure cannot take any more trains. Train operating companies have ordered, or made commitments to order, over 2,300 new vehicles, although 90 per cent of these are to replace existing rolling stock. The new rolling stock, when it comes into service, should have some impact on overcrowding in some areas because some of the new trains will have more seats or more standing room than the trains they are replacing.

However there are gaps in the measurement of overcrowding.

3.22 There are some significant gaps in the information needed to assess overcrowding across the network and to predict where overcrowding will arise in future. Two Passenger Transport Executives (West Yorkshire and Strathclyde) measure overcrowding in their areas but, in general, overcrowding is not required to be measured outside London. Furthermore, passenger counts are infrequent, expensive and unreliable. Three train operating companies (WAGN, Anglia Railways and Thameslink) now have electronic weighing systems, which can provide an estimate of the number of people in a carriage at any point in time. The Authority would like to see all companies install this or other equipment which would improve the accuracy and speed of passenger counts.

3.23 In 1998, OPRAF commissioned a programme of research to examine the nature and causes of the growth in passenger demand that has occurred in recent years and to assess the potential demand for passenger rail services up to 2010. This work is not yet complete; the first stage, a national survey of non-passengers to understand the barriers to rail travel, was completed in January 2000. It identified (in descending order of importance) cheaper tickets, improved connections and more direct trains, and more or better stations as the main changes which would persuade people out of their cars and on to the railway.

Conclusions

3.24 Passenger numbers are growing fast in all areas of Great Britain. This growth has exceeded that predicted by the industry's existing forecasting models. Since franchising, almost all train operating companies have increased the services they offer but overcrowding, where it is measured, has also increased. The information currently available to the Authority on overcrowding lacks accuracy, frequency and completeness and there is limited scope within franchise agreements to address overcrowding. OPRAF applied its powers where it could to encourage train operating companies to provide agreed seat capacity, to ensure that companies placed their rolling stock where it was most needed and that they had plans to address overcrowding. However, the Short Formation Incentive Payment regime, which penalises train operating companies which fail to provide the required number of carriages on peak hour trains, appears to be more effective with some companies than others, probably because the penalty rates are not high enough.

3.25 The main cause of increasing overcrowding is the growth in the number of people travelling by train. Cancellations and failure to provide agreed seat capacity exacerbate the problem. But the main limiting factor is the physical capacity of the network, in terms of track and platforms. New rolling stock is therefore unlikely to do much to alleviate the overcrowding in London and the South East, and in any case most of the planned investment is to replace existing rolling stock.

3.26 The Authority is seeking to improve the information available to it on passenger growth and overcrowding. It has begun to analyse where passenger growth is occurring and why, and is developing more accurate ways of measuring passenger numbers. There are inherent difficulties in counting passengers disembarking from trains manually and the Authority is seeking to encourage train operating companies to adopt more accurate and flexible electronic systems.

3.27 The Authority is trying to address the challenge of unanticipated passenger growth combined with the physical constraints of the network. In its guide to the franchise replacement process, it announced that it intends to introduce the following changes to new franchise agreements.

- The penalty rates in the Short Formation Incentive Payment regime would be doubled.
- More frequent and accurate recording of the number of passengers travelling on all services would be required.
- The Authority would consider adjustments to fares to encourage passengers to avoid the high peak.
- Companies would be allowed to raise fares, in some circumstances, to pay for capacity improvements after these have been delivered.

Part 4: The cost and quality of passenger rail travel

Performance since franchising

Fares

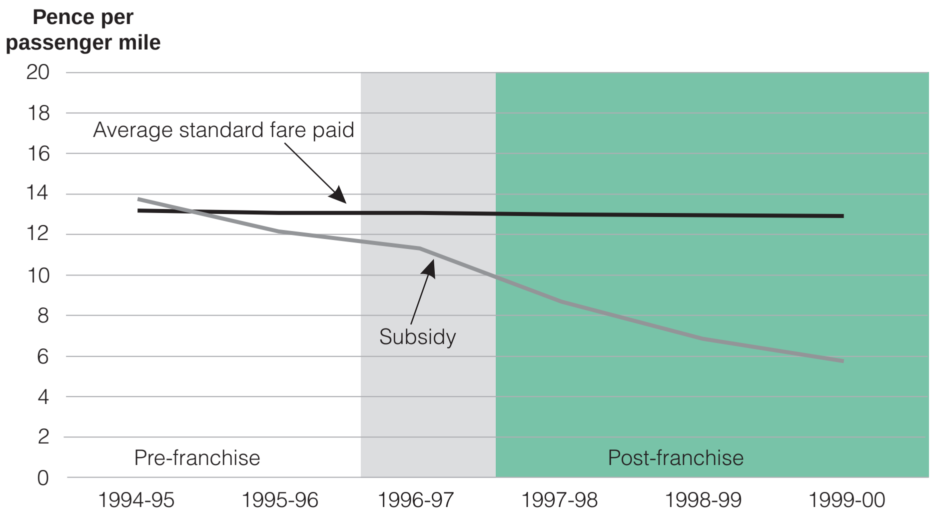
Fares have fallen slightly in real terms, whilst subsidy has halved.

4.1 Around 40 per cent of fares are subject to regulation, with allowable fares increases linked to the retail price index. In real terms, passengers can now travel further for their money than under British Rail. Standard class fares fell by an average 0.9 per cent between franchising and August 1999, compared to a gradual increase over time under British Rail, according to work carried out for the Authority by AEA Technology (Figure 21). The taxpayer is also better off because both the total subsidy and subsidy per passenger mile have also fallen.

Figure 21

The trend in standard class fares and subsidy per passenger mile, at 1998-99 prices

Standard class fares have fallen slightly in real terms since franchising, at a time when subsidies per mile have nearly halved in real terms.



Source: National Audit Office analysis of OPRAF commissioned data

Note: Fares are all standard class fares. Subsidy includes that administered through Passenger Transport Executives. Both fares and subsidy are in real terms, at 1998-99 prices.

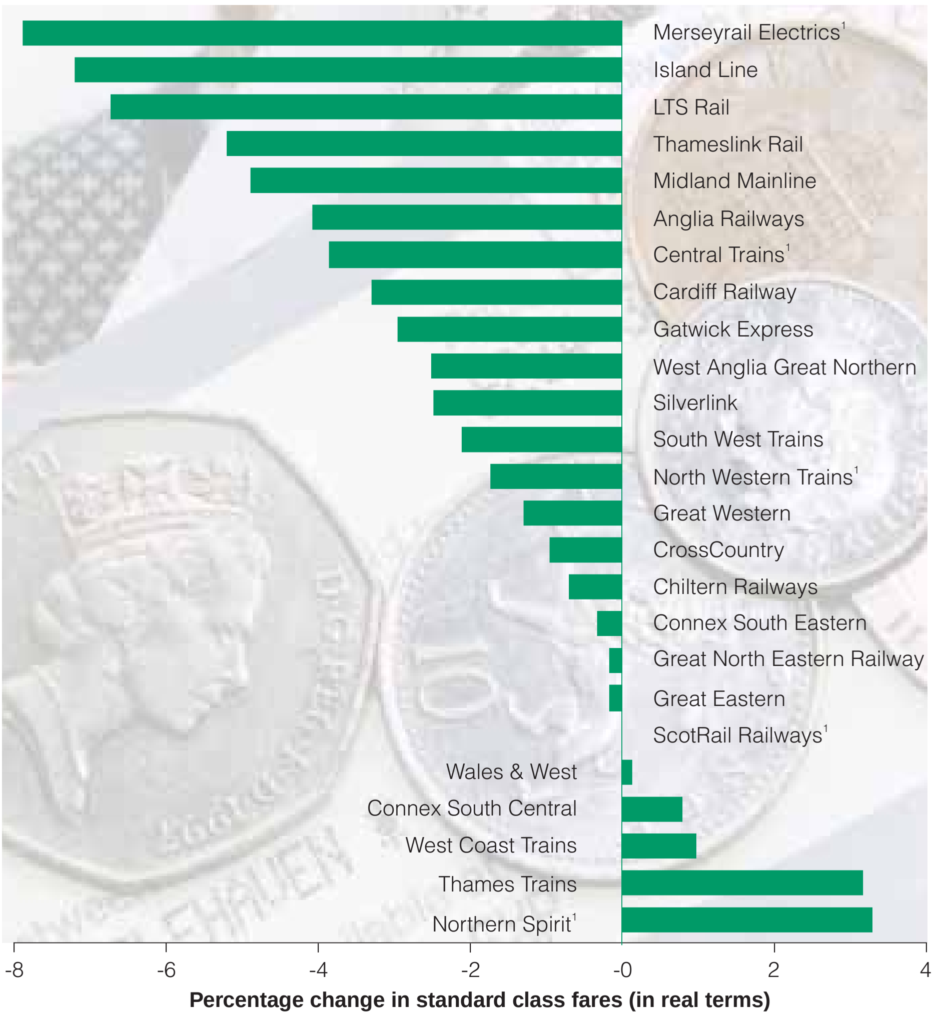
Some fares have risen whilst others have fallen.

4.2 A survey by the Rail Passengers Council (formerly the Central Rail Users' Consultative Committee) in May 2000 found that, between January 1996 and January 2000, average standard class fare increases were slightly below inflation but first class fares have risen by more than inflation. It also found variation in price rises between different types of fares. Some walk-on fares have increased above inflation, while advance purchase fares have fallen. Some train operating companies have raised fares whilst others have reduced them (Figure 22) and in metropolitan areas Passenger Transport Executives can influence fares. For example, the average standard class fare paid on MerseyRail decreased by 8 per cent in real terms since 1995-96, because of free travel provided to senior citizens, whilst the average fare paid on Northern Spirit routes increased by 3 per cent over the same period. At the rail summit called by the Secretary of State in February 1999, the train operating companies collectively committed to keep average fares increases, both regulated and unregulated, below inflation.

Change in average standard class fare paid, by company, from 1995-96 to 1998-99

Figure 22

19 of the 25 train operating companies have reduced standard class fares since franchising.



Note: 1. These train operating companies provide services supported by both the Authority and the Passenger Transport Executives.

Source: AEA Technology

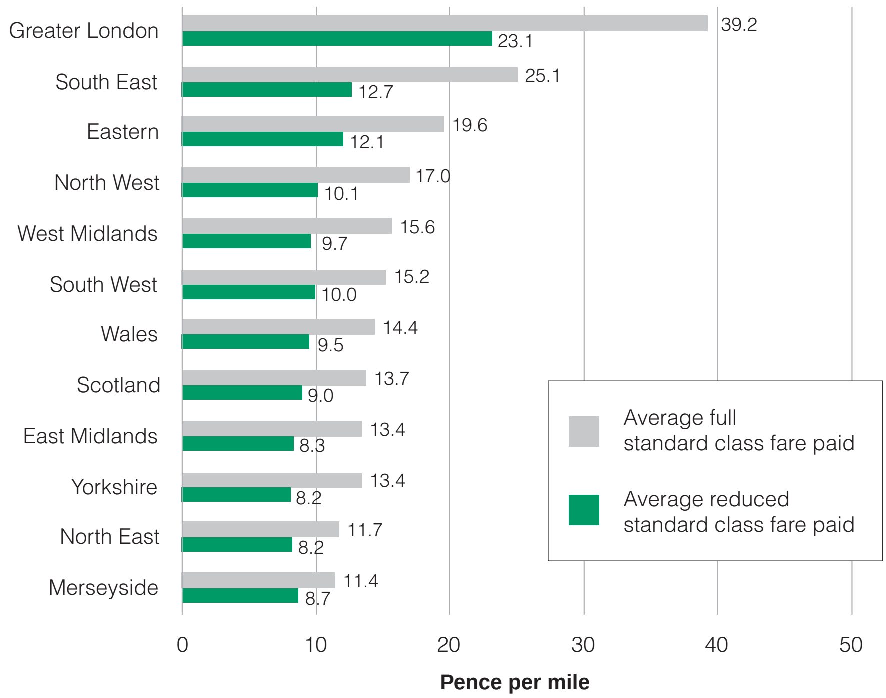
There are regional differences in fare levels …

4.3 Although fares are in general coming down there are marked regional differences. Figure 23 shows the variation in the average price paid in pence per mile for standard class travel within each region. The cost of travel by season ticket is less variable than the full daily fare. However, commuting into London, at around 14 pence per mile, is some 35 per cent more expensive on average than commuting elsewhere. These differences in fares levels are largely historical and in part reflect the variation in subsidy per mile which companies receive, with regional railways receiving higher subsidies per mile than commuter services in London and the South East (see Appendix 1).

Figure 23

Average fares paid per mile travelled in standard class, by region, in 1998-99

It costs more to travel by train in London and the South East than elsewhere in Britain.



Notes: 1. Full standard class fares include standard open single and return fares and day returns and season tickets. Reduced standard class fares include saver, super saver, apex and discounted advance purchase fares and cheap day returns.

2. Includes travel within regions only.

Source: AEA Technology

Passenger satisfaction

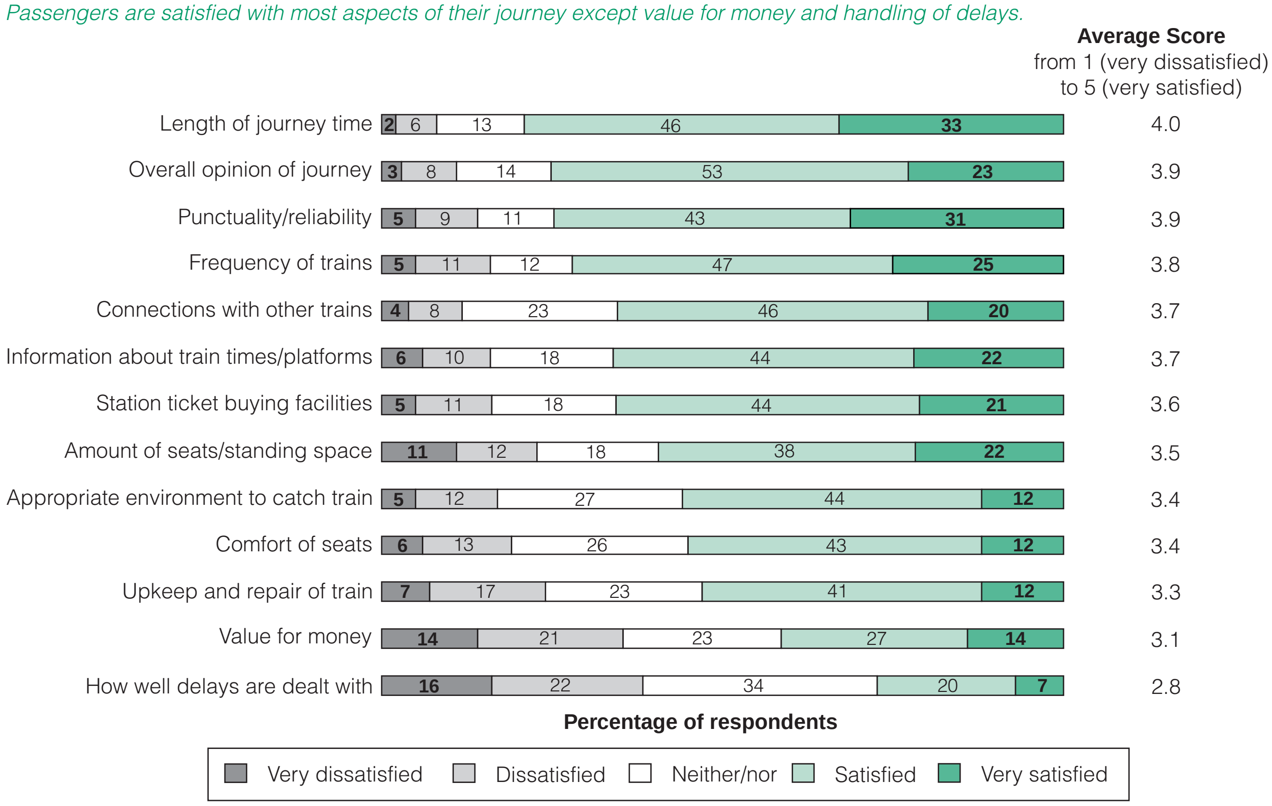
... and many passengers are less satisfied with the value for money of their journey than other aspects of rail travel.

4.4 The Authority has little direct information on the actual quality of service experienced by passengers but uses passenger satisfaction surveys to measure passengers' perceptions of the service provided. In March 2000, in the second of a new series of national surveys of passengers, the Authority found that despite general satisfaction with that day's journey, passengers were less satisfied with its value for money and were dissatisfied with the way companies handled delays. This mirrored the results of the first National Passenger Survey carried out in September 1999. Passengers in London and the South East were more dissatisfied than in other regions with almost all aspects of their journey, possibly reflecting a higher proportion of commuters amongst those sampled in this region. The Authority found that 86 per cent of leisure passengers were satisfied with their journey, compared to 75 per cent of business travellers and 67 per cent of commuters.

Figure 24

Results of the second National Passenger Survey, March 2000

Passengers are satisfied with most aspects of their journey except value for money and handling of delays.



Source: The Oxford Research Agency

4.5 Earlier surveys carried out by train operating companies show that satisfaction has fallen slightly since franchising. These surveys were of limited usefulness in providing a detailed national picture of passenger satisfaction because each company's survey asked different questions in different ways. However, surveys carried out in Summer 1999 show that of 25 train operating companies, 16 have seen a decline in passenger satisfaction since franchising, two have seen a rise and seven have seen no overall change. Passengers rated only two aspects of train travel higher than before franchising: the quality of catering services and the helpfulness of staff (Figure 25).

Changes in passenger satisfaction with different aspects of train station services since franchising, shown in descending order of change

Figure 25

Passengers are less satisfied with most aspects of train and station services than they were before franchising.

Satisfaction decreased

- Cleanliness
- On-train comfort
- Station environment
- Operational performance
- Value for money
- Personal safety
- Information about train services
- Ticketing

Satisfaction increased

- Catering
- Helpfulness of staff

Source: National Audit Office analysis of OPRAF data

Complaints

Complaints have risen.

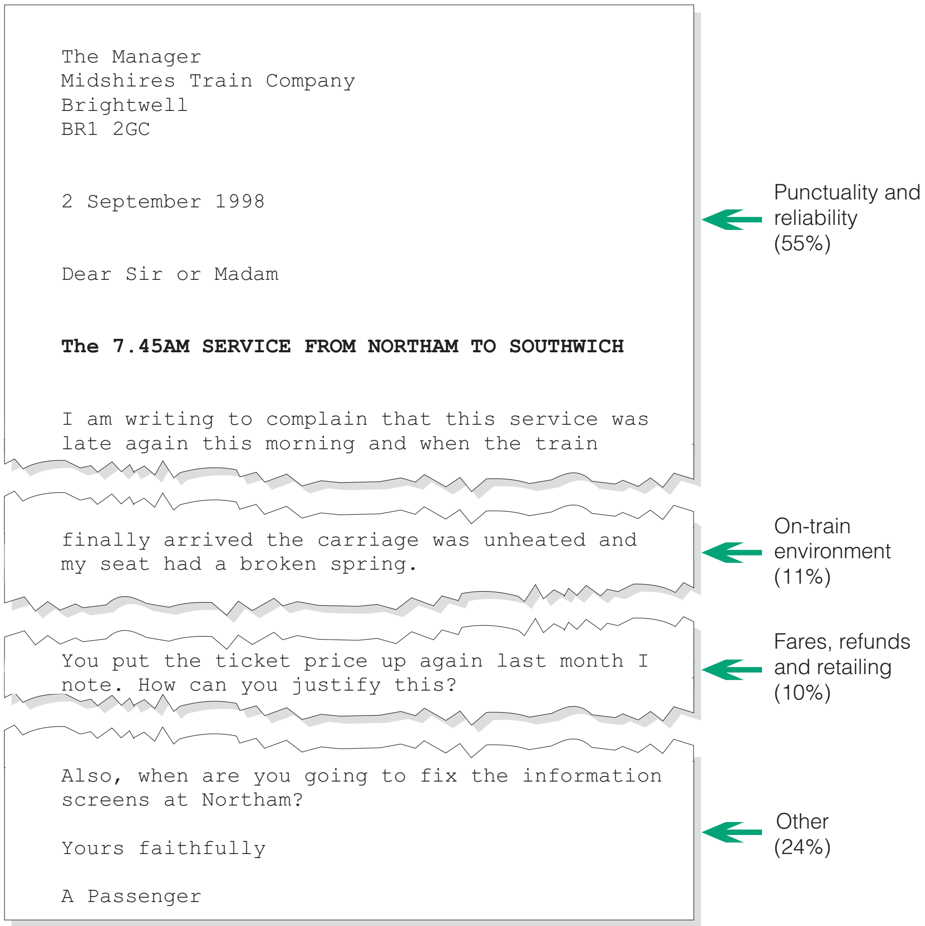
4.6 Passenger complaints are made to train operating companies in the first instance and are collated and published by the Rail Regulator. Complaints increased by 8 per cent in 1998-99 compared to 1997-98. There were almost 1.1 million complaints in 1998-99, or one complaint for every 820 passenger journeys, compared to one every 870 journeys in 1997-98. Comparative data about complaints under British Rail are not available because British Rail did not record complaints systematically. However, passengers dissatisfied with an operator’s response to their complaint (whether British Rail or a train operating company) can refer their complaint to their regional Rail Passengers Committee (formerly known as Regional Rail Users Consultative Committees). The Committees have received a growing number of complaints in recent years, from 8,259 in 1994-95 to 18,771 in 1998-99.

4.7 Around 55 per cent of complaints are about punctuality and reliability. Other complaints fall into 12 categories of which the greatest number are complaints about the on-train environment, encompassing issues such as the comfort of seating, noise, temperature, facilities on the train and cleanliness; and about fares, retailing and refunds (Figure 26).

Complaints about passenger rail services 1998-99

Figure 26

Punctuality and reliability are the biggest causes for complaint about passenger rail services.



The Manager
Midshires Train Company
Brightwell
BR1 2GC

2 September 1998

Dear Sir or Madam

The 7.45AM SERVICE FROM NORTHAM TO SOUTHWICH

I am writing to complain that this service was late again this morning and when the train

finally arrived the carriage was unheated and my seat had a broken spring.

You put the ticket price up again last month I note. How can you justify this?

Also, when are you going to fix the information screens at Northam?

Yours faithfully

A Passenger

Source: Office of the Rail Regulator Complaints Bulletins

4.8 Despite the general high level of dissatisfaction amongst passengers in London and the South East, in 1998-99, the vast majority of complaints were directed at the five companies which run inter-city services which received one complaint every 175 journeys on average. The eleven London commuter train operating companies received one complaint every 2,765 journeys and regional railway companies, one complaint every 945 journeys. However, the number of complaints is not a good measure of passenger dissatisfaction because it includes compensation claims made under Passenger's Charters for delays of more than one hour. Long distance services are more likely to suffer longer delays and the higher ticket value makes it more likely that passengers will make a claim.

Passenger service commitments

Train operating companies have made a variety of commitments to improve the quality of passenger services.

4.9 Train operating companies have made a variety of specific franchise commitments to improve the quality of passenger services. For example, most train operating companies promised to spend over £1 million on security measures, mainly on closed circuit television systems, before the end of their franchise term. The main types of commitments made were to upgrade station facilities and introduce new and refurbished rolling stock, additional services, enhancements to the Passenger's Charter and various initiatives to improve links with other modes of transport, for instance by bus/rail through ticketing and travel card schemes and better facilities for cyclists. We are unable to place a value on the commitments made or provide a simple picture of progress to date as the Authority does not keep information in this form.

However, minimum standards for stations may not be fully met.

4.10 Franchise agreements require train operating companies, which operate all but 14 of Britain's 2,500 stations, to meet minimum station standards. Railtrack, as the landlord, is responsible for structural repairs to stations and non-routine maintenance but companies must ensure, for example, that all stations have a public address or freephone link for use in an emergency, weather-proof waiting accommodation, and be kept reasonably clean and have adequate lighting. Train operating companies have certified that they have met these standards. However, we cannot say whether the standards are fully met because OPRAF did not inspect stations often or in a systematic way. A report published in February 2000 by the Rail Passengers Committee for Eastern England (formerly the Rail Users Consultative Committee for Eastern England) suggests that there may be areas of non-compliance with the standards. The Committee inspected all stations in their area and found, for example, that, contrary to the standards, 38 per cent of stations had no form of passenger information system and 35 per cent did not have a public telephone at or near the station.

OPRAF action

Regulation seeks to ensure that key fares do not rise above inflation …

4.11 Under section 28 of the Railways Act 1993 the Authority has a duty to secure reasonable fare levels for the passenger. The Authority's strategy is to regulate key fares (see Figure 27), thereby exerting market pressure on train operating companies to limit increases on other fares. About 40 per cent of all fares are regulated. Maximum permissible increases are based on an RPI-x formula, currently RPI-1%, but increases not taken in one year can be taken in the next.

The main regulated and unregulated fares

Figure 27

Fares for most daily travellers are regulated.

REGULATED FARES	UNREGULATED FARES
All saver fares	All first class fares
Standard day returns where no saver exists	Cheap day single and return
Standard weekly season tickets	One day travel card
All London, Edinburgh and Cardiff commuter fares	Network awaybreak
Protected railcards, (eg Disabled railcard)	Supersaver
	Advance purchase (eg Apex)

Source: OPRAF

… except, for some companies, where a fares adjustment mechanism allows higher fares when justified by better performance.

4.12 For some fares charged by London commuter train operating companies, allowable fares increases may be adjusted by up to two per cent based on previous performance under the incentive regimes, such that poorly performing train operating companies are allowed smaller fares increases than the standard, and better performance allows greater increases. Thus passengers pay more for good punctuality and reliability but less for bad. The scheme is revenue neutral to the train operating companies; extra revenue from good performance is passed on by the companies to the Authority through a subsidy adjustment called the fares incentive adjustment payment or FIAP, and vice versa for poor performance. FIAP has resulted in a net £2.1 million being paid to train operating companies since franchising, reflecting punctuality and reliability which has, on the whole, declined since 1996-97.

The Authority has reliable systems for monitoring regulated fares.

4.13 We found that the Authority has reliable systems for ensuring that train operating companies do not exceed the permitted increases in regulated fares. The Authority also intends to monitor whether the train operating companies' commitment to keep average fares below inflation is met, and has commissioned work to examine the effect of regulation on all fares.

4.14 OPRAF commissioned consultants Transport Strategies Limited to carry out a review of fares regulation in 1998. They found that passengers groups were concerned that the fares adjustment mechanism was rewarding train operating companies for mediocre performance. Some commented that performance should reach a higher standard before the subsidy adjustment comes into effect, so that passengers do not pay more for performance they still regard as poor. There was also concern that in the case of larger train operating companies, poor performance on some routes did not preclude an above-average fare increase if the companies' average performance improved. The train operating companies, on the other hand, reported that they found it difficult to communicate to passengers why fare rises were taking place and some companies commented that there was no reason why they should necessarily want to increase fares because they were performing well.

4.15 In 1999, OPRAF asked consultants AEA Technology to carry out a review of its incentive and penalty regimes. In an industry survey, the consultants found that FIAP was considered to be the least clear and least sound of OPRAF's regimes. However, the consultants concluded that the fares adjustment mechanism was based on sound principles although relatively complex and slow to act. The consultants recommended retaining the adjustment of fares to reflect performance, but removing the compensating change in subsidy, so that the risks and rewards of poor or better performance are transferred from the taxpayer to the train operating companies.

OPRAF's action to improve passenger satisfaction was unsuccessful.

4.16 On passenger satisfaction, train operating companies are required under the franchise agreements to commission independent satisfaction surveys of their passengers and can be required to produce action plans if passenger satisfaction falls below benchmarks established around the time of franchising. Where OPRAF required train operating companies to produce and carry out action plans, satisfaction has not improved.

OPRAF did not measure directly the quality of service provided …

4.17 The Authority believes that it would be prohibitively expensive to measure the actual quality of service experienced by passengers, for example by employing train and station inspectors, but has found passenger satisfaction data difficult to interpret. Train operating companies use a variety of survey methods with the result that the Authority was unable, until the recent introduction of the National

Passenger Survey, to gain a national picture of passenger satisfaction or analyse the reasons for changes in satisfaction. With the existing surveys, OPRAF found that respondents' views on specific aspects of service such as on-train comfort, varied from period to period and suspected that they may be influenced by other factors such as poor reliability or the effects of adverse publicity. The Authority also believes that franchising raised passengers' expectations and that this is reflected in both survey results and the rising number of complaints.

... but the Authority hopes to remedy this.

4.18 The Authority is hoping to address the weaknesses in its approach to the measuring the 'softer' aspects of passenger rail travel through 'mystery shopping' where travellers are paid to systematically record and report on the service they receive, to provide feedback on their journey from buying a ticket to exiting from the final destination. It is currently piloting the approach on two train operating companies. However it cannot direct the action companies take in response to the findings. In addition, the Authority intends, in replacement franchises, to impose a contractual obligation on companies to improve passenger satisfaction through the ability to require companies to spend up to £1 million a year on measures to improve customer satisfaction.

Conclusions

4.19 OPRAF was successful in containing average fares increases through its strategy of regulating key fares, although there are significant price differentials between regions for reasons which are largely historical, and some unregulated fares have risen by more than inflation. In particular, passengers in London and the South East pay more for key fares. In 1999, train operating companies agreed to keep average fares increases, both regulated and unregulated, below inflation.

4.20 In its guide to the franchise replacement process, the Authority has said that it proposes to continue to regulate key fares within an overall cap of RPI-1%, but changes to the cap will be considered where fares increases could be used to increase capacity or pay for "significant quality improvements". The Authority proposes to retain the fares adjustment mechanism for London commuter train operating companies. This mechanism allows fares to be raised for companies which improve punctuality and reliability compared to the previous year and requires lower fares increases for companies which perform worse. The fares adjustment mechanism is unpopular with train operating companies whilst passenger groups consider that it rewards companies for performance which is still mediocre. There is a lack of evidence of its impact on performance. The Authority proposes to increase the effectiveness of the mechanism by removing the corresponding subsidy adjustment which compensates train operating companies for income lost because of performance-related fares adjustments. But this still leaves passengers in London and the South East paying more for improved punctuality and reliability, which they may not be inclined to do, particularly in the light of current levels of overcrowding.

4.21 OPRAF used surveys of passenger satisfaction to measure the quality of service experienced by passengers. It undertook very little direct verification of the services delivered, even for those aspects of service such as station standards which are spelled out in the franchise agreements, preferring to rely on self-certification by the train operating companies. Where OPRAF attempted to raise passenger satisfaction through action plans agreed with train operating companies, these have not had the desired effect of increasing satisfaction levels. The Authority has recognised that other factors may influence passenger satisfaction but has not discovered a way to allow for these other factors so that it and train operating companies can target their attention where it is most needed. The Authority is piloting 'mystery shopping', where customers are paid to record and report on the service they receive, on two companies. This may offer a viable, and relatively cheap, alternative approach, provided that train operating companies take action to address any shortcomings found.

4.22 The Authority has told bidders for replacement franchises that it is intending to link the results from its national surveys of passenger satisfaction to an incentive regime. It has also set out a range of quality of service issues it wants bidders to consider in formulating their proposals, designed to improve passenger services and reduce the barriers to switching from car to public transport.

4.23 In addition to its current efforts to raise passenger satisfaction, we recommend that the Authority institute a programme of station inspections to determine whether standards laid down in the franchise agreements are being met. In doing so, the Authority should re-examine whether the currently defined standards are sufficient to encourage meaningful improvements and, if necessary, revise the standards when negotiating new franchises. It should also consider whether the 'mystery shopping' approach could usefully be brought within franchise agreements so that train operating companies would have to take action in response to shortcomings it reveals.

Glossary

Authority	Shadow Strategic Rail Authority and Strategic Rail Authority, incorporating OPRAF and the British Railways Board.
Breach of franchise	Failing to carry out the exact terms of the franchise agreement.
Call-in	A requirement for a train operating company to attend the offices of the Authority to explain why cancellation or capacity standards have not been met.
Call-in threshold	The cancellations and seat capacity standards which lead to call-in if exceeded.
Default	A serious breach of franchise which could lead to termination of the franchise agreement.
Department	Department of the Environment, Transport and the Regions
Fares adjustment mechanism	An adjustment to fares in January whereby better performance in the previous year to June, allows a company to raise fares and worse performance forces a company to reduce fares.
Fares Incentive Adjustment Payment	An adjustment made by the Authority to a company's subsidy payments to remove the effects of the fares adjustment mechanism from a train operating company's income.
Franchise agreement	The legally-binding contract which governs the relationship between the Franchising Director and the train operating company.
Force majeure	A cause of operational failure deemed to be beyond the control of the train operating company. It includes industrial action, security alerts and some other types of incident which affect the running of services and which last more than 12 hours, such as signal failures, broken rails and suicides.
Franchise plan	A part of the franchise agreement which sets out a company's commitments to improve its services.
Franchising Director	The person appointed by the Secretary of State to contract for passenger rail services with train operating companies.
OPRAF	Office of Passenger Rail Franchising
ORR	Office of the Rail Regulator

Passenger service requirement	The services which a train operating company must plan to provide in the timetable of rail services it agrees with Railtrack.
Passenger Transport Executive	A body under local authority control which pays subsidies for local train services.
Punctuality Incentive Payment	An incentive regime in which train operating companies pay penalties for poor punctuality and reliability and receive incentive payments for good punctuality and reliability.
Rail Passengers Committees	The eight regional statutory bodies which represent the interests of passengers. Formerly known as Rail Users Consultative Committees.
Rail Passengers Council	The statutory consumer organisation which represents passengers nationally. Formerly known as the Central Rail Users Consultative Committee.
Railtrack	Railtrack plc, the company which owns and operates the railway infrastructure in Great Britain.
Replacement	The process of tendering for and negotiating new franchise agreements to replace the existing franchise agreements.
Short Formation Incentive Payment	A penalty regime in which train operating companies pay the Authority if they do not provide the agreed number of carriages.
Timetable Change Incentive Payment	A penalty regime in which train operating companies pay the Authority for making late changes to the advertised timetable.
Train operating company	A company which provides passenger rail services under a franchise arrangement.
Train plan	A plan which sets out the train formation and seat capacity which train operating companies should provide on services where a minimum capacity is deemed essential, such as commuter services.

Appendix 1

The 25 franchises awarded by OPRAF

Train Operating Company	Length of franchise (years and months)	Planned trains 1999-00	Average annual subsidy over the life of franchise, at 1998 prices in total (£ m)	Average annual subsidy over the life of franchise, at 1998 prices per train (£)	Subsidy 1999-00 per passenger mile (pence)	Incentive regimes P-punctuality R-reliability C-capacity
Inter City						
CrossCountry	15	39,200	40.4	551	6.4	-
Great North Eastern Railway	7	37,100	25.6	734	0.8	-
Great Western	10	59,900	36.6	730	3.5	P, R, C
Midland Mainline	10	40,300	-0.6	-28	0.2	C
West Coast Trains	15	62,000	-64.6	-1,111	2.8	C
Regional						
Anglia Railways	7.3	85,700	19.3	236	5.9	P, R
Cardiff Railway	7.6	113,700	17.0	165	32.0	P, R, C
Central Trains*	7.1	408,600	111.7	359	19.1	P, R
Island Line	5	22,000	1.9	86	58.7	R
Merseyrail Electrics*	7.2	205,000	7.0	267	34.7	P, R
North Western Trains*	7.1	476,200	81.8	298	31.4	P, R
Northern Spirit*	7.1	499,400	111.5	338	20.8	P, R
ScotRail Railways*	7	647,600	111.4	321	19.5	P, R
Wales & West	7.6	183,200	56.3	292	12.6	P, R
London Commuter						
Chiltern Railways	7	84,700	9.3	113	3.9	P, R, C
Connex South Central	7	555,000	54.4	103	3.4	P, R, C
Connex South Eastern	15	531,000	37.5	70	3.5	P, R, C

continued ...

Train Operating Company	Length of franchise (years and months)	Planned trains 1999-00	Average annual subsidy over the life of franchise, at 1998 prices		Subsidy 1999-00 per passenger mile (pence)	Incentive regimes P-punctuality R-reliability C-capacity
			in total (£ m)	per train (£)		
Gatwick Express	15	58,100	-14.3	-244	-8.4	-
Great Eastern	7.3	254,000	6.2	39	0.9	P, R, C
LTS Rail	15	109,700	19.3	177	5.4	P, R, C
Silverlink	7.6	203,300	30.1	154	5.6	P, R, C
South West Trains	7	553,400	56.1	104	2.6	P, R, C
Thameslink Rail	7.1	181,300	-17.6	-98	-2.4	P, R, C
Thames Trains	7.6	260,000	16.3	61	3.3	P, R, C
West Anglia Great Northern	7.3	322,200	14.9	48	2.4	P, R, C

* Part funded by Passenger Transport Executives (PTEs) and, with the exception of North Western Trains, subject to penalties for capacity administered by the PTEs. Subsidy figures include franchise payments made or due under agreements with the PTEs.

Appendix 2

OPRAF's and the Authority's statutory duties and objectives

Statutory duties under Railways Act 1993

- fulfil the objectives given by the Secretary of State in accordance with instructions and guidance
- ensure that payments made will achieve the Secretary of State's objectives economically and efficiently
- designate services eligible for franchising and select the franchisee
- ensure franchise agreements provide for reasonable fares where passenger interests require
- provide passenger services where a franchise agreement is terminated or comes to an end
- maintain a public register of franchise agreements and amendments

Secretary of State's Objectives (November 1997)

Principal objectives

- increase the number of passengers travelling by rail
- manage existing franchises in a manner which promotes the interests of passengers
- secure a progressive improvement in the quality of railway passenger and station services

Other objectives

- stimulate the development of railway services by encouraging investment
- protect passenger network benefits
- encourage inter-modal travel
- promote the personal security of passengers
- promote better facilities for disabled passengers
- encourage efficiency and economy in the provision of passenger railway services

Secretary of State's Objectives (March 1994-November 1997)

Principal objectives

- secure that railway passenger services in Great Britain are provided under franchise agreements as soon as practicable
- secure an overall improvement in the quality of railway passenger and station services

Other objectives

- encourage efficiency and economy in the provision of railway services
- promote the use and cost-effective development of the railway network
- promote the award of franchise agreements to companies in which qualifying railway employees have a substantial interest

Appendix 3

Study methodology

Interviews

To gain an understanding of how OPRAF and the Authority went about its work, we conducted semi-structured interviews with senior managers and staff from franchise management, policy development, performance monitoring, analytical monitoring and compliance.

We also consulted a number of other interested parties including Save Our Railways, the Rail Reform Group, the Central Rail Users' Consultative Committee (CRUCC), Chiltern Railways, Midland Mainline, LTS Rail and the Association of Train Operating Companies.

Examination of documentation

We examined records kept by OPRAF and the Authority; including background documentation, franchise management and enforcement files, action plans and feasibility studies, and consultants' reports.

Analysis of data on the performance of passenger rail services

The data on passenger rail performance appearing in this report are largely drawn from different sources within OPRAF and the Authority. We have also used other published data and data drawn from consultants' reports commissioned by OPRAF. It was beyond the scope of this study to collect data at first hand on passenger rail performance.

The large majority of statistics used in report are analyses of time trends or variations between train operating companies. However we used bivariate regression analyses to test whether growth in passenger numbers, change in service capacity, percentage of trains cancelled or reduced in length or failure to meet planned seat availability were linked to overcrowding.

The only statistically significant relationship (at a 95 per cent confidence level) was found between growth in passenger numbers and overcrowding. The analysis suggested, unsurprisingly, that there was a positive relationship between increased passenger numbers and overcrowding, but the limited data set meant that strong statistical inferences could not be drawn.

Compliance work

We took the following steps to confirm whether OPRAF had adequate systems for monitoring and enforcing franchise agreements:

- reviewed the findings from our financial audit of OPRAF, to assess the accuracy and reliability of systems underpinning the incentive and penalty payments;

- examined data gathered by OPRAF since October 1997, on train operating company performance, and compared the number of cancellations each period to call-in thresholds, to ensure that OPRAF had identified and taken action on all occasions when thresholds were breached. Where OPRAF had not called a company in due to force majeure, we sought explanations for the granting of force majeure from the franchise manager;

- examined a sample of 15 breaches of franchise and call-in thresholds to determine the timeliness and appropriateness of the action taken;

- compared the quantity of call-ins and breaches for cancellations and capacity failures to the expected rate of enforcement action based on OPRAF's statement of how thresholds were set. We did not examine the data on which performance thresholds were set; and

- examined all passenger satisfaction action plans and assessed whether they were appropriate, timely and effective.

Expert panel

We obtained assistance from a panel of expert advisors comprising Giles Fearnley (Chairman of the Association of Train Operating Companies and Chief Executive of Prism Rail Plc), Dr John Preston (Transport Studies Unit, Oxford University) and Anthony Smith (National Director of the Rail Passengers Council).

Appendix 4

Summary of train operating company performance for 1999-2000

Train Operating Company	Punctuality		Reliability	Capacity[1]	Over-crowding[1]	Passenger satisfaction
	% trains arrive within 5 minutes of scheduled time	% trains more than 15 minutes late	% timetabled trains run	% trains reduced in length	% passengers in excess of capacity	between franchising and Summer 1999
Inter City						
CrossCountry	70.4	16.4	99.1			↓
Great North Eastern Railway	80.5	9.1	99.2			=
Great Western	75.0	12.3	98.2			↓
Midland Mainline	75.8	9.1	99.4			↑
West Coast Trains	72.3	12.2	99.1			↓
Regional						
Anglia Railways	88.9	3.4	99.4			=
Cardiff Railway	86.6	3.0	99.3	0.3		↓
Central Trains	84.9	4.7	98.9			↓
Island Line	93.9[2]	0.2	99.2[2]			=
Merseyrail Electrics	87.1	3.0	97.6			=
North Western Trains	90.5	2.6	99.2			↓
Northern Spirit	88.8	3.3	98.6			↓
ScotRail Railways	92.0	1.8	98.9	2.2	2.8	↓
Wales & West	87.8	3.7	99.0			=

continued ...

Train Operating Company	Punctuality		Reliability	Capacity[1]	Over-crowding[1]	Passenger satisfaction
	% trains arrive within 5 minutes of scheduled time	% trains more than 15 minutes late	% timetabled trains run	% trains reduced in length	% passengers in excess of capacity	between franchising and Summer 1999
London Commuter						
Chiltern Railways	90.0	2.4	99.7	0.9	4.0	↓
Connex South Central	87.4	2.6	98.8	1.9	3.9	↓
Connex South Eastern	84.9	2.5	98.6	4.1	2.4	↓
Gatwick Express	85.5	1.2	99.4			=
Great Eastern	91.8	2.0	99.6	0.8	2.7	↓
LTS Rail	88.0	2.4	98.3	4.4	1.7	⇧
Silverlink	85.9	3.9	98.5	2.2	2.5	↓
South West Trains	83.9	3.7	98.7	1.2	3.9	↓
Thameslink Rail	86.0	3.3	98.7	2.0	3.3	↓
Thames Trains	89.7	1.8	99.0	1.2	1.7	↓
West Anglia Great Northern	90.1	3.3	99.4	0.3	1.8	=

Notes: 1. Peak hour capacity and overcrowding only.

2. Island Line punctuality and reliability are shown for the period October 1999 to March 2000.

Source: Shadow Strategic Rail Authority