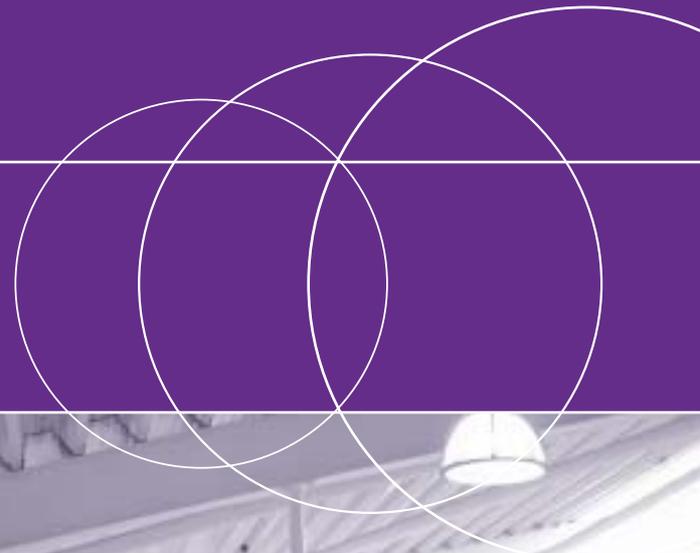


AUDIT REVIEW

Taking the initiative

Using PFI contracts to renew council schools



The Accounts Commission

The Accounts Commission is a statutory, independent body, which through the audit process, assists local authorities in Scotland to achieve the highest standards of financial stewardship and the economic, efficient and effective use of their resources. The Commission has five main responsibilities:

- securing the external audit
- following up issues of concern identified through the audit, to ensure satisfactory resolutions
- reviewing the management arrangements which audited bodies have in place to achieve value for money
- carrying out national value for money studies to improve economy, efficiency and effectiveness in local government
- issuing an annual direction to local authorities which sets out the range of performance information which they are required to publish.

The Commission secures the audit of 32 councils and 34 joint boards (including police and fire services). Local authorities spend over £9 billion of public funds a year.

Audit Scotland

Audit Scotland is a statutory body set up in April 2000 under the Public Finance and Accountability (Scotland) Act 2000. It provides services to the Accounts Commission and the Auditor General for Scotland. Together they ensure that the Scottish Executive and public sector bodies in Scotland are held to account for the proper, efficient and effective use of public funds.

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Overview

Private Finance Initiative deals can be complex, costly and controversial but are capable of delivering services that have hitherto not been thought affordable by other means. This report examines the PFI procurement of schools in Scotland and draws a number of main conclusions.

Councils have managed the PFI processes well. Scotland's PFI schools deals are at an early stage of their 25 or 30 year lives and it is too early to judge their contribution to education. However, based on the evidence from this study the schemes have been or are being negotiated in a professional, rigorous and constructive manner.

There are real benefits and to date PFI providers are delivering the new schools and associated service reliably and without significant cost changes for councils. There is evidence of clearer specification of service requirements, improved control over construction costs and timescales and innovative solutions stimulated by competition. Councils, teachers and pupils generally welcome the improved accommodation and level of service that has come on line so far. **However there are also disbenefits**, such as the reduction in future financial flexibility and the higher costs associated with the more rigorous PFI procurement.

The councils' analyses of the PFI compared to the notional publicly funded alternatives (Public Sector Comparator or PSC) demonstrates that the cost advantage was narrow. The PSC is used to compare the cost of PFI with other procurement options but the cost estimates are subject to inherent uncertainty and subjectivity. Current approaches to the PSC take no account of the higher cost of private finance compared to council borrowing.

By their nature many of the benefits associated with the PFI, unlike the costs, are difficult to quantify. **From the evidence of our study it has not been possible to draw overall conclusions on value for money by comparison of the costs and benefits involved.**

The benefits available from PFI are not necessarily unique to PFI. Other forms of procurement could potentially secure many of the benefits identified, although there has been limited opportunity for councils to test this in practice in recent years under conventional funding and it is recognized that the scale and impact of some PFI schemes has been unprecedented. The prospect of increased flexibility in capital finance for councils may offer the opportunity to develop a greater procurement choice between PFI and non-PFI routes. **Further development of the PFI approach, cross boundary partnerships and a wider choice of procurement routes could all improve value for money in this sector.**

There is significant variation between councils in the cost of schools developed under PFI. The factors giving rise to this need to be better understood and cost effectiveness measures need to be developed in this area to promote value for money. There has been some informal sharing of good practice between councils but there is insufficient guidance in areas such as classroom size, heating, lighting and other factors. There is no clear consensus on what makes for a well-designed school.

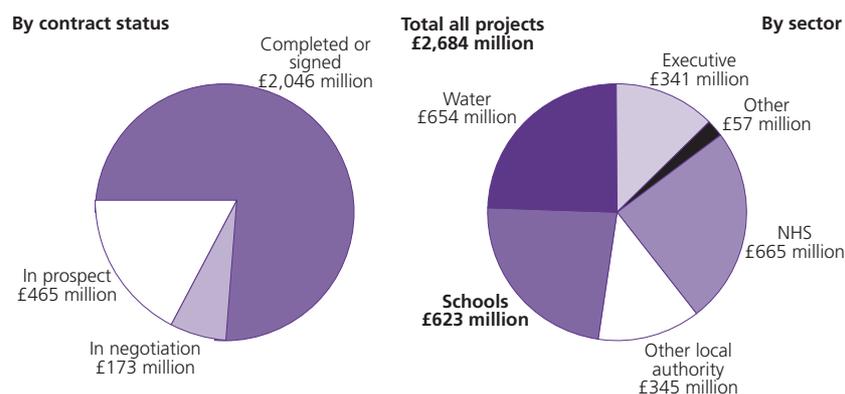
There is no systematic sharing and development of staff skills and knowledge in the area of PFI schools procurement and project management. It is important that the experience and skills learned from current PFI schools projects are transferred to future projects. **The Scottish Executive should therefore consider developing a leadership role in this area and, in partnership with councils, should develop best practice guidelines about what is a minimum acceptable standard for the learning environment.**

Executive summary and conclusions

Introduction

1. There continues to be public interest and debate about the relative advantages and disadvantages of the private financing of public services. Private Finance Initiative¹ (PFI) deals are a very important component of procurement by the public sector. To date across the public sector in Scotland there is £2.7 billion investment in PFI deals (Exhibit 1), accounting for around one fifth of Scottish publicly sponsored capital expenditure over the period 1998-99 to 2002-03. Over the same period, PFI schools deals represent around one third of all Scottish local government capital expenditure including PFI.

Exhibit 1: Scottish PFI projects



Note: Based on reported capital value of completed deals and deals in prospect

Source: Scottish Executive

2. Promoting effective education and learning in Scotland's schools is a top priority for councils and the Scottish Executive. Councils operate some 2,800 primary and secondary schools and additional schools investment is necessary to support the achievement of education goals. This means repairing, reconfiguring or in some cases completely replacing existing schools that have become obsolete, dilapidated or are in other ways no longer fully fit for purpose. The backlog of basic repair and maintenance was costed at £1.3 billion in 2000 and the need to modernise schools could add to the costs.
3. Scottish Ministers' priorities include a commitment to modernise some 100 schools through PFI and other means by 2003. Twelve "first generation" PFI schools projects (some 80 schools) have a forecast investment value of more than £600 million and a lifetime expenditure commitment of more than £2 billion. In 2001 the Scottish Executive invited bids from local authorities for funding a further tranche of PFI schools deals.

Paragraphs 1.1 to 1.4

Paragraphs 1.5 to 1.7

Exhibit 4

¹ This report generally refers to PFI contracts, PFI being the particular form of contract in all cases so far for the provision of new schools in partnerships between the public and private sectors. PFI contracts are part of the Public Private Partnership (PPP) approach. PPPs are a key element of the Government's strategy for delivering modern high quality public services and promoting the UK's competitiveness and cover a range of business arrangements. As well as PFI contracts PPPs include joint ventures, concessions, outsourcing and the sale of equity stakes in state owned businesses.

4. This report is about the recent PFI deals in the education sector in Scotland. Based mainly on in depth audit review of a sample of six projects (for 65 schools), it examines:
 - why councils adopted PFI procurement for schools and how they set the scope and objectives of each project (Part 1)
 - how well councils awarded and implemented each PFI schools contract (Part 2)
 - the value for money that councils can expect to achieve from the PFI schools projects (Part 3).

Annex A Study Methods

Annex B Case Studies

Part 1: Adopting the PFI route for schools and setting project objectives

The single most important driver of PFI as the procurement route for new schools has been the opportunity to obtain substantial additional investment

5. **There was clear evidence of a high priority for renewal of inadequate, redundant or dilapidated school buildings in each PFI schools project that Audit Scotland examined. But financial considerations were dominant regarding the selection of the PFI procurement route.** In practice the Scottish Executive has determined the level of investment in each case as well as the financing/procurement route. Alternative traditionally funded procurement routes have not been a viable option within the financial framework in operation.

Paragraphs 1.8 to 1.10

Setting clear objectives under PFI has imposed strong project discipline

6. **While the selection of PFI has not been a completely free choice, it has still provided significant benefits to councils, over and above the access to improved services.** The fundamental commercial feature of PFI schools projects is payment for provision of a managed school facility achieving predetermined service levels over the 25 or 30 years contract with deductions for non-performance. This has focused the minds of councils and PFI schools providers from the outset, emphasising the need for long term planning and clarifying responsibility for effective risk management between the parties.

Paragraphs 1.12 to 1.21

Councils have managed affordability aspects well

7. Affordability relates to whether and how the council can meet the projected PFI contract payments over the entire contract period. To defray the PFI costs, notwithstanding grant support from the Scottish Executive, councils need to identify new funding to pay for the improved level of service. **Ultimately new funding for PFI schools must come from reductions in other areas of expenditure and/or increased taxation. Councils have managed this aspect carefully and achieved targets to ensure that the requirement for additional funding is clearly identified and minimised.**

Paragraphs 1.22 to 1.24

For some new schools there is a risk of long-term pupil roll reductions and surplus capacity

8. For any new school there is a need for careful analysis of the relationship between future demand (how many pupils will require to be educated) and the capacity (teaching space) that is provided. Significant under occupation can affect the quality of the school environment and lead to increased unit costs per pupil².

Paragraph 1.25

² 'Room for Learning: Managing Surplus Capacity in School Buildings', Accounts Commission, 1995

9. The Scottish school age population is forecast to reduce by about one-quarter over the next 25 years (with considerable variation in individual council areas), continuing a general trend since the 1960s. For PFI contracts councils are responsible for deciding the maximum school capacity and in some cases have made over provision against forward projections rather than accept a risk of over crowding if projections prove to be understated.

Paragraphs 1.26 to 1.28
Exhibits 9, 10

10. As well as future demand issues councils and PFI providers need to take account of a wider set of issues in planning future schools provision. School buildings and facilities cannot be divorced from the educational activity that takes place within them. Recent provisions for special education needs and other legislation may impact on schools and it is likely that during the 25 and 30 years PFI schools contracts there will be further legislation and other shifts in educational policies that may affect how the buildings are used and what is required of them.

Paragraphs 1.29 to 1.30

11. Councils will continue to be responsible for the core education service and will retain control over key areas such as setting education policies and determining catchment areas. They are therefore better placed than PFI providers to mitigate the impact of any significant fall in demand or changing requirement for school services. However, not all the demand risks are necessarily best left with councils. **For future PFI projects councils and private sector providers should explore this risk allocation carefully, particularly whether PFI providers should and could take more responsibility for managing risk associated with the need to reconfigure schools, should demand vary within predetermined limits.**

Paragraphs 1.31 to 1.34

To assist future projects there is a case for centrally led research on best practice in specifying school requirements in Scotland

12. An issue common to all PFI schools projects is the standard of accommodation necessary to promote and sustain effective learning and teaching. This is important because teaching space costs money, both to build and subsequently to maintain and operate.

Paragraphs 1.34 to 1.35

13. For a PFI schools contract, if a council puts too much emphasis on specifying inputs it may compromise value for money by limiting the ability of the private sector to apply innovation and effective risk management in the design and delivery of school facilities. Each council should therefore specify its requirement in “output” terms. But, while there has been some informal sharing of good practice, there are no agreed common standards to underpin the necessary specifications.

Paragraphs 1.36 to 1.37

14. **Experience from the early PFI schools projects suggests that there are three critical areas where greater consensus could and should be established to promote equity and best value in future projects: (1) classroom sizes, (2) planning accommodation to make the most efficient use of space and (3) the development of consistent technical and environmental output requirements for schools.** This calls for a sound analysis of what is necessary and effective, to promote quality and equity of provision across Scotland, including flexibility in the longer term, without setting down an overly prescriptive and inflexible set of “rules”. **For various reasons, not least the significant financial support it provides for the school projects, the Scottish Executive is well placed to lead this initiative in partnership with councils.**

Paragraphs 1.38 to 1.47

For future schools projects the Executive should consider the benefits of ensuring there is a real choice of procurement options

15. Although there are areas for further development regarding service specification and demand risk, overall there has been good and careful preparation of the PFI schools projects. But funding considerations and a presumption of better value for money have so far driven PFI as the chosen procurement approach.
16. **The recent emphasis on PFI means that evidence of the outcome and effectiveness of large-scale schools procured by traditional methods is rare. The danger is that decisions in favour of PFI procurement may be driven by stereotypes of poorly performing alternatives rather than good evidence of demonstrable benefit.**
17. **The Scottish Executive should therefore consider the benefits of promoting real choice between procurement options for school services.** Creating a framework that allows councils to choose between a mixture of procurement options (ie both PFI and non-PFI) should help secure best value from PFI. The prospect of increased flexibility in the capital finance regime for councils seems to provide a good opportunity to test whether the important procurement lessons from PFI schools projects can be transferred effectively to other contract structures, subject to prevailing constraints on public sector capital spending.

Paragraph 1.11

Part 2: Managing the procurement and delivery of PFI schools projects

In general councils have managed the processes well, consistently with good practice

18. The scale and intensity of the investment in each project and the subsequent financial commitments extending over the long contract life emphasise how much is at stake financially and non-financially for councils and PFI providers during the lengthy contract competition and award process. **Councils have implemented strong project management and governance procedures, which have helped them to run the large and complex procurement competitions systematically and successfully.**

Paragraphs 2.1 to 2.20

Exhibit 15

In keeping with good practice and the achievement of value for money there appears to have been good competition for the PFI schools contracts

19. Competition is central to achieving value for money. For all cases examined in depth **Audit Scotland was satisfied that there had been generally good competitive tension between the bidders during the main competitive phase.** However the risk of being unable to secure a good degree of market interest is still a factor to consider. **For future business cases councils should give consideration to the possibility that weak market interest in the PFI solution may mean an alternative procurement path to PFI could offer better value.**

Paragraphs 2.21 to 2.35

Exhibit 18

The PFI competition process is promoting best value not just lowest price

20. For PFI schools the competition process reinforces the requirement for councils to be clear about quality, service and whole life cost and to appraise and select bids accordingly. This has necessarily produced a tension between what could be afforded in each case and desirable investment and service levels. Sometimes it has required councils to cut back the scope of work being sought. But even where this has happened the evidence does not

indicate that there has been any undue emphasis on price to the exclusion of other proper considerations. Councils appear to have made balanced judgements in such areas helped by the clear emphasis under PFI on specified standards of service.

Paragraph 2.36

Councils and the Executive should explore ways to ensure hard won experience on signed PFI schools projects is fully applied to others

21. Many educational, financial, technical, managerial and contractual questions have to be answered as part of each PFI schools project and councils have developed PFI procurement skills and solutions to problems project by project. **Although councils are retaining experienced staff for the next round of PFI projects and informal networking exists, there is no systematic sharing and development of skills and knowledge in the area of PFI schools procurement and management. Bearing in mind the scale and spread of prospective new schools investment over the coming years the Scottish Executive should consider developing a clear leadership role in this area.**

Paragraphs 2.38 to 2.41

Part 3: PFI schools and value for money

22. The value for money of each PFI schools project is indicated by its outcomes, the expected benefits and disbenefits and the comparison of the estimated cost of the deal with those of a hypothetical publicly funded alternative (the public sector comparator). Value for money can mean spending more if the additional benefits achieved are worth more than the additional costs in providing an enhanced service.

Paragraphs 3.1 to 3.3

The evidence to date on key deliverables is positive

23. Nine PFI schools contracts have been signed to date but only three projects have so far completed the initial construction phase prior to the commencement of the main service period. The contracts are all at an early stage of their lives and whether the contractors can provide the necessary quality of service consistently and without unforeseen extra costs or complications over the full period can only be judged as the contracts roll forward. **The evidence of outcomes so far is that the PFI providers are delivering the required new/refurbished schools rapidly, largely on time and without significant cost changes for the client. Bearing in mind the scale of the construction works this is an important achievement. Users also appear to welcome the improved accommodation and level of service that has come on line.**

Paragraphs 3.4 to 3.9

Councils should adopt a deliberate approach towards management of the main service delivery phase of each PFI schools project

24. PFI providers are incentivised to deliver the full contract service from the due date but success in delivery cannot be guaranteed and there is a need for each council to have a clear strategy for managing any under performance by the PFI provider. It is important to develop good working relationships and avoid adversarial relations but the provider has priced for risks arising from each schools project, and may be rewarded or suffer additional costs depending on actual performance. **It is important to the whole integrity of the PFI process that councils as clients hold the providers to their contractual commitments.**

Paragraphs 3.10 to 3.12

There are substantial benefits from schools PFI compared to traditional procurement

25. **There is a clear focus on service, underpinned by the nature of the PFI contracts.** In each case the comprehensive, detailed and output-focused PFI

Paragraphs 3.13 to 3.17 contract ensures the commercial responsibilities and accountabilities on each side are well known and clear. The incentives and responsibilities in the contract foster good quality decision-making by clients and service providers.

26. **There is innovation and fresh thinking.** An essential part of the PFI process is clear and fundamental thinking about the output needed over the long term. Most councils consider this has stimulated or supported worthwhile change in service provision, although the impact varies by project. It appears to have been most important for the larger strategic projects, such as Edinburgh and Glasgow, where there is greater scope for the PFI provider to offer fresh thinking about the basic configuration of project schools.

Paragraphs 3.18 to 3.22

27. Fresh thinking by prospective PFI providers is also evident at the detailed proposals level, when the winning bidder has offered superior technical solutions to those the council might otherwise have obtained. The benefits seem to flow from the requirement under PFI to prepare much of the design in competition with other providers. This is potentially an important gain but may inhibit valuable consultation with users on their needs, and this aspect needs careful management.

Paragraphs 3.23 to 3.24

28. **There are improved relationships and better partnership working in some cases.** Adversarial relations between clients and contractors leading to cost problems and delays are widely held to be associated with traditional building projects in both public and private sectors. However, councils see better relations with the private provider as an important benefit from PFI, which may itself help to resolve problems.

Paragraphs 3.25 to 3.27

29. **There is better risk management.** PFI schools contracts transfer responsibility for many risks to the PFI provider, which would otherwise remain with the council. This reduces the council's exposure to risk, but there is a price to be paid for risk transfer. The PFI process helps greatly to ensure that costs involved in managing risk are minimised though it does not guarantee that councils achieve the most cost-effective balance in this area.

Paragraphs 3.28 to 3.31

30. **There is strong financial control.** A unique feature of the PFI is the rigorous financial examination of project viability before any contract is signed. Because private funders require a high degree of confidence in the economics of the project before they will provide any funds, they insist on very systematic, rigorous and thorough testing of the project business plans and, particularly, the project risks. This analysis of risk appears to be very much more thorough than appraisal at the equivalent stage of a conventional, publicly funded project and reinforces the emphasis under PFI on careful preparation and planning.

Paragraphs 3.32 to 3.35

The benefits of PFI procurement are not consistently available to all schools projects or all unique

31. **Notwithstanding the many qualitative benefits from PFI procurement of schools, it is important to emphasise that the opportunity to capture the benefit is not present to the same degree in every project and some benefits are more strongly associated with particular project phases. It may be possible to achieve similar benefits from other procurement approaches but in practice because of funding considerations there has been little or no opportunity for councils to test them in practice.**

Paragraphs 3.36 to 3.39

32. The matrix in Exhibit 2 summarises where from experience to date benefits are likely to arise from PFI schools procurement, and to what extent

alternative options may be possible in each case. **For future schools investment councils should be encouraged to match procurement options to project needs taking account of the particular benefits likely to be available from both PFI and alternative procurement methods. There may be scope also, in the right circumstances, for councils to forge cross boundary partnerships and package their procurement proposals in a way that will maximise and extend the potential benefits of the PFI approach.**

Paragraphs 3.40 to 3.41

Exhibit 2: Where PFI schools procurement can bring benefits

Key		Procurement phase	Design of schools	Construction of schools (including transitional activities such as decant)	Maintenance of schools including life cycle maintenance	Operation of school facilities (cleaning, janitors, reception and in some cases catering)
√	No simple or well proven way of replicating PFI benefit under alternative procurement routes	Feature				
		Focus on quality of service	√	?	√	X
?	PFI benefit potentially available from alternative procurement routes	Project management	√	√	Not applicable	Not applicable
		Risk management	?	?	√	?
		Improved relationships promoting synergy, quality and added value	?	√	√	?
		Strong financial control and management	?	?	√	?
		Innovation	?	X	?	X
X	No evidence of significant benefits from PFI	Effective exploitation of opportunities	?	Not applicable	Not applicable	?

Source: Audit Scotland. Exhibit 27 in Part 3 gives supporting detail.

Managing the PFI schools procurement process is expensive for both public and private sectors, particularly for smaller projects

33. There is a price to be paid for entering into a PFI schools contract. There are significant costs associated solely with establishing the contract. Councils' costs include mainly their own staff time and expenditure on consultant advisers. Similarly, costs arise for the private sector companies during the competition process. **In the six cases that Audit Scotland examined the combined set up and advisers' cost for private and public sectors ranged between £1 million and £12 million (or between 5% and 15% of core construction costs), and tended to be a proportionately greater burden for smaller projects.**

Paragraphs 3.42 to 3.48
Exhibit 28

The long-term PFI schools expenditure commitments may constrain councils' future spending decisions and reduce flexibility

34. An important benefit of each PFI schools project is the financial certainty associated with the contract, with each council's payment being highly predictable. The corollary is that councils do not retain the same ability to flex elements of budgets one year with the next, to deal with changed circumstances and variations in their financial position.

Paragraphs 3.49 to 3.50

35. **The experience so far is that in all cases councils have only contracted for part of their education estate to be covered by PFI. There is a risk that future financial pressures will fall on the remaining part of the education budget or on other council services.** For six projects examined by Audit Scotland the net PFI payments (after deducting level playing field support grant) averaged 14% of the councils' total non-staff education budget. In the

Paragraph 3.51
Exhibit 29 largest contract (Glasgow) the net PFI charges represent 24% of the council's entire non-staff education expenditure in 2000-01.

The cost of private finance is higher than in the public sector

36. In any project requiring financial investment there is a cost for capital. Where borrowing is the chosen source of funding the cost will be the financing charges made by the lender. Where there is also equity investment shareholders will seek dividends. In PFI schools projects the overall financing cost incurred by the PFI provider is part of the project costs and adds to the level of charge the council pays in return for the service.

Paragraphs 3.52
to 3.56

37. **For six PFI schools projects Audit Scotland examined the overall financing cost for the private sector³. This cost generally varied in the range 8% to 10% a year, 2½% to 4% higher than a council would pay if it borrowed money on its own account for a similar project. This higher cost of capital adds costs of between £0.2 million and £0.3 million a year for each £10 million invested in a project. As paragraph 42 below explains, this difference has not been reflected in the costings which councils have prepared when comparing the forecast cost of each PFI schools deal with a hypothetical publicly funded alternative (the public sector comparator).**

Paragraphs 3.57
to 3.61
Exhibit 32

The PSC/PFI comparison on its own cannot provide decisive evidence of best value

38. Approval of each PFI schools project should depend on value for money. As well as the consideration of qualitative elements there must also be a quantitative comparison of the costs of a proposed PFI schools project with a publicly financed benchmark. The cost benchmark is the public sector comparator (PSC), which is the estimate the council prepares in each case of what it would cost to provide a similar level of service using traditional (non-PFI) procurement.

Paragraphs 3.63
to 3.71

39. For six PFI schools projects, Audit Scotland reviewed each council's PSC analysis underpinning its decision to proceed with the PFI contract. **In general the analysis had been completed with reasonable care, with allowance for risk. Each council had followed the guidance on methodology available from the Treasury. Overall, based on their PSC costings, each council concluded that in each case the PFI schools project offered a more economic option than conventional procurement, though in most cases the margin in favour of PFI was narrow.**

Paragraphs 3.72
to 3.74
Exhibit 36

40. **However, while care is taken in preparing the PSC, and the effort applied may be substantial, there is inherent uncertainty associated with developing the costings,** to a much greater degree than for equivalent costings that underpin each PFI bidder's contract proposals. And, despite extensive technical and professional work and input to the costings in each case, there is an emphasis on the bottom line and a perception of the PSC as a simple pass/fail test. The analysis for PFI school projects most often resulted in a set of costings, which indicated the PFI solution was more economic but without an analysis of the reasons. Audit Scotland's analysis is that, in most cases, the main costs underlying the PFI option are not significantly different from or are higher than the equivalent forecast costs under the PSC. In most cases the risk adjustment tipped the balance back in favour of the PFI option.

Paragraphs 3.75
to 3.77
Exhibits 37, 38

³ The overall financing cost includes all borrowing costs and the forecast dividend payments to equity shareholders, as they are reported in the business plan (financial model) that the special purpose company responsible for delivering the PFI service must provide for each PFI contract.

41. **A further consideration is the inevitable subjectivity that surrounds judgements on which the PSC costings are based** and wider decisions regarding the respective merits of the PFI and any alternative solution to providing new schools. Under the terms of the competition for financial support from the Scottish Executive for PFI projects, no funding for the PSC was available. Consequently if the PSC had suggested that the PFI was not economic it would have proved fatal to the project (no PFI schools project has so far failed this test). A great deal therefore hangs on professional and technical judgements underpinning the PSC costings. Although the costings invariably involve a significant degree of subjectivity and inherent uncertainty, reliance on them is critical to the decision whether a project will proceed or not.

Paragraphs 3.78
to 3.79

42. It is important, too, to understand how council borrowing rates that are typically below actual PFI financing costs in individual schools projects affect the relative costs of the PSC compared to the PFI option. **But the method of constructing the PSC means that this important difference in financing costs is not included in the comparison. Audit Scotland considers that, for local authorities, the actual costs of debt financing are a relevant if not necessarily decisive factor in testing the economy and ultimately the value for money of a PFI schools contract.**

Paragraphs 3.80
to 3.89

There is scope to improve the usefulness of the PSC as a value for money benchmark

43. **Based on analysis of six PFI schools projects there is significant variation in the unit costs experienced between schemes. For example for five PFI schools projects in central Scotland the annual PFI contract cost per pupil place varies between £1,000 and £2,200. Though one of the reasons is the different scope of the projects the variations need to be better understood and Audit Scotland has identified different dimensions of cost effectiveness in providing school accommodation that influence the overall accommodation cost per pupil. Key factors are the amount of space needed, how efficiently it is used and the cost of providing and servicing the space.**

Paragraphs 3.90
to 3.94
Exhibits 39, 40

44. The quantitative analysis represented by the preparation of a PSC is, and should remain, a useful aid to decision-making. It is obviously prudent for councils, when appraising PFI schools bids, to have an independent benchmark to help assess the financial and technical proposals that bidders have offered. **But councils and the Executive should assess how best to reflect the cost of borrowing by councils in the comparisons and otherwise improve the usefulness of the PSC as a cost benchmark. Councils should improve the analysis of cost effectiveness for future cost comparisons and appraisals and share information such as unit construction and operating costs actually experienced in individual projects.**

Paragraph 3.95

Part 1: Adopting the PFI route for schools and setting project objectives

Promoting effective education and learning in Scotland's schools is a top priority for councils and the Scottish Executive

- 1.1 Councils operate some 2,800 primary, secondary and special needs schools. Under the Standards in Scotland's Schools etc Act 2000 Scottish Ministers and local authorities must endeavour to secure improvement in the quality of education in Scotland's schools. The education priorities for schools in Scotland now encompass raising standards of educational attainment for all, supporting and developing teachers and pupils, promoting equality and fostering citizenship.
- 1.2 There is an increasing acceptance that additional school investment is a priority to support the achievement of education goals. It will be necessary to enhance school environments so that they are conducive to teaching and learning and the achievement of the higher attainment levels sought.

The single most important driver of PFI as the procurement route for new schools has been the opportunity to obtain substantial additional investment

- 1.3 Currently Scottish Ministers control capital expenditure by councils under section 94 of the Local Government (Scotland) Act 1973 and related regulations. Councils are provided with consent to incur expenditure and can only exceed these limits by disposing of assets to generate capital receipts or by making revenue contributions to capital. Within the consents provided councils finance investment by borrowing, which allows costs to be spread over future years in order to match the benefits from the expenditure incurred. In 2000-01 councils' total General Fund capital expenditure (excluding housing) was £659 million, of which £92 million (14%) was financed from current revenue.

Exhibit 3: Education capital expenditure by Scottish councils 1996-2001

	1996/97	1997/98	1998/99	1999/00	2000/01
Education capital	£119 m	£122 m	£164 m	£157 m	£149 m
All non-housing capital	£483 m	£512 m	£575 m	£579 m	£659 m

Source: *Capital Expenditure and Treasury Management Statistics*, CIPFA statistical service (except 2000-01 data which are from councils' returns to the Scottish Executive).

- 1.4 Councils have expressed concerns that the resources available have meant that capital investment has, for a number of years, been largely restricted to ensuring that schools and educational establishments were kept wind and watertight and complied with health and safety legislation. At national level evidence from the Association of Directors of Education Scotland and COSLA in May 2000 was that the amount needed to tackle the basic repair and maintenance backlog in Scotland's schools was £1.3 billion⁴.

⁴ Association of Directors of Education Scotland and COSLA: Submission to the Enquiry by the Scottish Parliament, Education, Culture and Sports Committee into Schools Infrastructure May 2000.

- 1.5 In 1996 and 1997, in response to the underlying pressures for additional investment the Scottish Office worked with councils and COSLA to explore the possibility of using PFI as an alternative form of financing to assist the procurement of council services, including new and refurbished schools. The Scottish Office made available new “level playing field support” grant to councils to assist this. This is broadly similar to the £ for £ government support for council loan charges under traditional capital spending arrangements. Scottish Ministers’ priorities include a commitment to modernise some 100 schools through PFI and other means by 2003⁵.
- 1.6 In 1998, after a competition between councils the Scottish Office allocated level playing field support to 20 PFI projects across a range of council services, including support equivalent to £50 million a year in total (once all projects are operational) for 12 PFI schools projects which are the focus of this report. The support was conditional on the PFI projects being “off balance sheet” and with contracts being signed by March 2002. The 12 PFI schools projects (some 80 schools) have a forecast investment value of more than £600 million; the lifetime expenditure commitment is more than £2 billion, supported by £1.4 billion level playing field support (Exhibit 4).

Exhibit 4: First generation PFI schools deals

PFI Schools Project	Status	Contract date	Full service commences	Capital value**	1st full year contract payment	Annual level playing field support payment	Duration	Total forecast level playing field support payments
Falkirk *	Operating	Aug 1998	Aug 2000	£71m	£11.9m	£8.6m	25 years	£216m
Balfour High School Stirling *	Operating	Apr 2000	Aug 2001	£17m	£2.2m	£1.6m	25 years	£40m
East Renfrewshire	Operating	July 2000	Aug 2001	£14m	£2.2m	£1.3m	25 years	£31m
Glasgow Project 2002 *	Operating	June 2000	Aug 2002	£225m	£41.5m	£14.7m	30 years	£430m
Aberdeenshire	Signed	May 2001	July 2002	£19m	£3.0m	£1.4m	25 years	£35m
West Lothian *	Signed	Aug 2001	Nov 2002	£28m	£4.4m	£1.9m	30 years	£58m
Fife	Signed	Mar 2001	Aug 2002	£39m	£6.5m	£3.7m	25 years	£92m
Highland *	Signed	Jun 2001	Aug 2002	£17m	£2.9m	£1.6m	25 years	£39m
Edinburgh *	Signed	Nov 2001	Aug 2003	£90m	£12.1m	£5.9m	30 years	£177m
Midlothian	In negotiation	–	–	(£33m)	–	(£3.1m)	(30 years)	(£94m)
East Lothian	In negotiation	–	–	(£30m)	–	(£3.0m)	(30 years)	(£89m)
Dumfries & Galloway	In preparation	–	–	(£60m)	–	(£3.3m)	(30 years)	(£99m)
Total				£643m		£50m		£1,400m

Note: * Projects examined in depth by Audit Scotland. Figures in brackets are estimates.

** ‘Capital value’ is forecast construction cost in most cases. For the Glasgow project capital value includes expenditure on computers and related equipment included in the PFI contract.

Source: Audit Scotland

- 1.7 In 2001 the Scottish Executive invited bids from local authorities for funding a second tranche of PFI schools deals. The Executive and council leaders also agreed to establish a joint Core Group to give a strategic overview of the way forward for the school estate, including buildings and other facilities. The remit of the Core Group is to support joint working between the Executive and COSLA towards the achievement of sustainable investment and demonstrable improvements in the school estate.

⁵ ‘Making it Work Together: A Programme for Government’, Scottish Executive, September 1999

- 1.8 For six PFI schools projects Audit Scotland examined the main reasons why each council had bought forward the project for PFI procurement. In all cases there was clear evidence of a high or very high priority for renewal of existing inadequate, redundant and or dilapidated school buildings. There was evidence that councils could simply not otherwise provide the investment levels necessary in each case using conventional resources (Exhibit 5).

Exhibit 5: PFI investment and section 94 capital consents for six councils

PFI school project	Schools PFI investment (generally spread over two years)	Average annual section 94 formula allocation 1997-98 to 2001-02
Balfron	£17 million	£5 million
Edinburgh	£90 million	£19 million
Falkirk	£71 million	£6 million
Glasgow	£225 million	£32 million
Highland	£17 million	£18 million
West Lothian	£28 million	£6 million

Source: Audit Scotland

- 1.9 It is evident from Exhibit 5 that for the larger PFI schools projects councils could not obtain equivalent investment levels over the same short periods within available limits. It is theoretically possible that for the smaller PFI projects similar investment levels could have been considered without recourse to PFI. However that would have involved committing the council's entire section 94 allocation for one to three years to the school project. In these smaller cases councils have chosen PFI because it provides additional investment without displacing other investment of similar priority. In some cases councils have selected relatively small projects as a deliberate means of testing with minimum risk a new approach to procurement.
- 1.10 The West Lothian and Glasgow schools PFI projects are typical examples of the financial considerations encouraging councils to procure services through PFI (Exhibits 6 and 7).

Exhibit 6: The selection of PFI as the procurement route for the Glasgow Schools project

In 1996 and 1997, prior to implementation of the PFI project, Glasgow City Council reviewed its secondary education provision. The council formed the view that if the educational standards and achievement in schools were to be raised then conditions in schools had to be improved across the whole estate. It adopted a strategy to raise standards in secondary education across the City through major rationalisation of its existing school stock. This was associated with a strategic review of requirements and reorganisation of catchments.

The council identified that 40% of the available places across all Glasgow secondary schools were surplus to requirement and that rationalisation would release financial resources to be recycled into the continuing schools. After consultation, implementation of the first phase of this strategy led to substantial changes to catchment areas and the closure of nine schools between 1997 and 2000, reducing the secondary estate from 38 to 29 schools.

The council's review of the secondary schools stock also indicated that the building fabric was generally in poor condition and that there were urgent backlog maintenance and repair requirements estimated to cost £30 million. Further substantial expenditure would be required to reconfigure the existing schools to meet current and future teaching and learning needs. The second stage of the council's strategy was to deliver improvements to address these problems with the physical fabric of the schools.

In 1997 a feasibility study identified five possible models to assist the council in its delivery of the required uplift standards; this included a do nothing, or status quo option. The feasibility study and the subsequent Outline Business Case in 1998 provide a rationale for pursuing the Public Private Partnership (PFI) route. Both were predicated on the argument that PFI was the only practical way to secure the £130-160 million estimated necessary investment (at that time) and a presumption of improved value for money through PFI. Both reports recommended the use of PFI as the only option that would address the uplift of the condition of Glasgow schools in a reasonable timescale. The traditional route would take far too long under the existing level of S94 capital consents.

Source: Audit Scotland

Exhibit 7: The selection of PFI as the procurement route for the West Lothian Schools project

On local government reorganisation in 1996 West Lothian Council inherited responsibility for education in its area from the former Lothian Region. The council inherited a stock of schools with a backlog of maintenance and upgrading.

Since 1996 the council's Education Services capital investment budget has been some £7 million to £10 million each year. Investment levels in part reflect significant funds from the disposal of residual assets of the former Livingston New Town Development Corporation. The council has invested in schools improvements, mainly providing new primary school capacity (where the impact of population growth was greatest) and in secondary schools removing temporary huts and addressing the most pressing health and safety needs arising from the inherited maintenance backlog.

Despite this investment level, before PFI the council expected the available capital funding would be insufficient to address the likely requirements for its schools to keep up with the current and growing pressures within the council's whole schools estate (65 primary and 11 secondary schools). Concern about the schools' physical condition and prospective growth in demand caused the council in 1996 to commission a viability study to assess the potential for addressing some of its schools investment needs through the PFI. The study completed in 1997 specified three school investment projects with potential for PFI procurement, although it did not identify how priorities should be set between possible candidates.

No PFI project immediately followed the 1997 study but in 1998, in response to the invitation from the Scottish Office to bid for PFI level playing field support, the council identified and put forward a package of school investment projects with potential for PFI procurement. The bid was in the form of an outline business case (OBC) for three secondary and three primary school projects. The council judged these schools to be in urgent need of refurbishment and/or extension. The scope of the proposal reflected how much level playing field support the council expected to be available. The scope was comparatively limited, reflecting the council's view that the PFI was new and "untested" and a cautious approach was prudent.

Source: Audit Scotland

- 1.11 In this context it is relevant to note that the Scottish Executive has indicated its intention to amend the current system of control on councils' capital expenditure⁶. This offers the prospect of a new framework for capital investment with greater flexibility to address local investment needs through public borrowing, subject to affordability and other appropriate constraints. It is hoped that the findings from this report on PFI and schools will contribute to the consideration of how such a revised framework would operate and the respective roles of PFI and conventional capital procurement within local government.

Setting clear objectives under PFI has imposed strong project discipline

- 1.12 We have seen that councils have brought forward PFI schools projects in response to significant underlying investment pressures, where recourse to alternative (traditionally funded) procurement routes has not been a viable option. While the selection of PFI has not been a completely free choice, it has nevertheless provided significant benefits to councils, over and above the access to services that could not otherwise be obtained.

⁶ 'Renewing Local Democracy – The Next Steps', Scottish Executive, March 2002

Under the PFI process school projects have been initiated after careful examination of underlying needs and aims

- 1.13 The scrutiny requirements of PFI come from several sources. Access to level playing field support for PFI schools was limited by competition under which councils prepared outline business cases with comprehensive analysis of the nature of the proposed project, the underlying need and the means of progressing the project including comprehensive option appraisal. At this early stage, before any approach to the market, councils were required to prepare in detail:
- an output specification. This is a clear statement in terms of service delivery of what is being sought. As well as guiding bidders' proposals in the subsequent competition it assists appraisal at this and subsequent stages.
 - a reference project or public sector comparator (PSC). This is a costing of a possible, realistic solution to the output requirement, worked up in sufficient detail to give assurance about whether the outcome of any procurement can be afforded. The analysis will also include an assessment and initial quantification of the main risks inherent in the project.
- 1.14 There is comprehensive generic guidance from Treasury and the Office of Government Commerce for councils concerning the necessary technical content of this analysis. In the cases Audit Scotland examined councils had generally completed the necessary analysis diligently and effectively. Consequently they had entered into the competitive procurement phase for each PFI school project with a clear focus on what was required in service terms and with the benefit of some early and helpful analysis of possible costs and benefits associated with the project.
- 1.15 Success at outline business case stage (and access to level playing field support) was only the first step for each of the PFI schools projects. The subsequent procurement required councils, as clients, to prepare further, comprehensive analysis of their objectives and requirements. This was for selecting potential bidders for the PFI contract and, particularly, as the basis for the subsequent competition and negotiation leading to the contract award. Exhibit 8 summarises the core documentation associated with the first phase of the competition for the Highland schools PFI project, which illustrates the scope and depth of the analysis required.

Exhibit 8: The Highland Schools PFI project: Invitation to negotiate documents

Volume 1: Background and invitation to negotiate (84 pages)

Volume 1 provides bidders with an overview of the project and clear and concise instructions to follow when preparing their bid submissions. It includes:

- A summary of the objectives and requirements of the project and the Council;
- An overview of the procurement process;
- The requirements for bid submission;
- The approach to bid evaluation.

Bidders may access additional information in the Council's data room specially established for this purpose.

Volume 2: Output specification (176 pages)

Volume 2 contains the Output Specification for the scheme and explains the scope of services and minimum standards that Bidders will be expected to meet in their bids. It is anticipated that specifying "what" is required, rather than "how" it is provided will afford bidders the opportunity to prepare effective bids and offer innovative solutions that, ultimately, will offer better value for money than the more traditional public sector alternative.

<i>Introduction</i>	5 pages
Overview; the Council's objectives; the project board, project team and advisers; the project schools; information and communication technology; furniture and equipment; outside funding	
<i>Council Requirements</i>	43 pages
Introduction; primary schools; secondary schools; life cycle maintenance; facilities management (FM); FM availability and performance requirements	
<i>Development Constraints</i>	2 pages
Introduction; planning matters; minimising disruption; management of the construction works	
<i>Design Performance Standards</i>	8 pages
Regulations and guidelines; building fabric; civil & structural engineering; building services	
<i>Room Data Sheets</i>	118 pages
Introduction; primary schools; secondary schools	

Volume 3: Draft project agreement (approx 200 pages)

Volume 3 contains the draft Project Agreement (contract). This presents the Council's position on all key issues, subject to negotiation with bidders. Bidders are requested to comment on the document in accordance with the instructions set out later in this document.

The draft contract incorporates guidance on the standardisation of contract terms for use in PFI/PPP projects that the Treasury Taskforce has developed.

Source: Audit Scotland, extracted from Highland Council tender documentation

Under PFI there is thorough, long-term thinking about the planning and provision of school facilities and associated financial matters

- 1.16 Under alternative procurement models with traditional financing it is recognised as good practice for councils as clients to specify and cost their requirements. But several factors differentiate this aspect of the PFI project process, and contribute to promoting improved value for money, as follows.
- 1.17 **The long-term contract focuses the mind of both the council and the PFI schools provider and brings a clear demand for long term planning.** The fundamental commercial feature of PFI schools projects is payment for provision of a managed school facility achieving predetermined service levels over 25 or 30 years with deductions for non-performance. Comprehensive, measurable performance standards concerning the business of operating, cleaning and maintaining schools have previously been absent or incomplete. Under PFI there is both a need and an opportunity to look afresh at long-term service and performance standards.

- 1.18 Twenty-five or 30 years PFI contracts also offer an opportunity to introduce a clearer split between teaching activity and the business of accommodation provision and management. If realised, this would free up head and senior teachers' time to concentrate on core education activity while at the same time giving a clearer focus to essential accommodation provision and management.
- 1.19 **Greater flexibility in project planning.** Because capital funding constraints are less relevant to PFI projects there is a greater ability to look, for example, at the optimum balance between upfront investment and later lifecycle expenditure. This gives an opportunity for better managed and more economic building operations and maintenance in the long term, by allowing lifecycle cost analysis to influence design and construction choices at the outset.
- 1.20 **More rigorous planning.** Payment for service in the long term, with PFI providers being at risk of financial loss from under performance, provides a strong incentive for rigorous realistic analysis as the basis for decisions in such areas. The PFI schools contract guarantees the maintenance of the buildings for the whole contract period whereas, under other arrangements, the maintenance budget was subject to reductions during periods of financial pressure.
- 1.21 None of these potential value for money benefits can be said to be uniquely available from PFI, since it is possible to conceive other contract mechanisms and structures that may offer similar outcomes. However, the evidence is that such hypothetical alternatives have not been adopted in practice. In the PFI schools cases that Audit Scotland examined, realistically it was only through a PFI solution that there was the opportunity to obtain the benefits indicated in these areas.

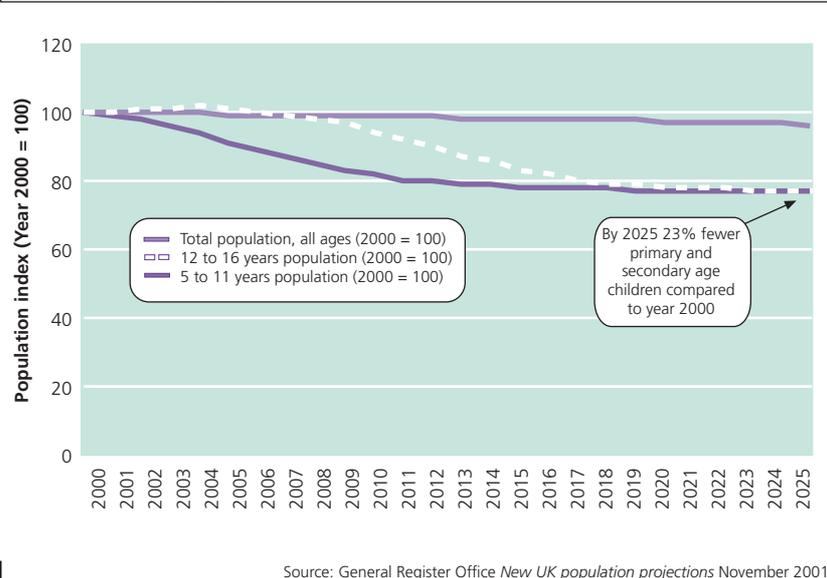
Councils have managed affordability aspects well

- 1.22 PFI affordability relates to whether and how the council can meet from available funds the projected contract payments over the life of the project.
- 1.23 Councils need to manage affordability because usually the forecast PFI payments for the new or refurbished schools exceed the running costs of the dilapidated or inadequate facilities they will replace. Even though the Scottish Executive provides grant support to help defray the PFI costs, in most cases councils have still needed to find additional new funding to pay for the improved level of service that the projects aim to deliver. Ultimately the additional funding must come through reductions in other areas of expenditure, increased council tax or a combination of both.
- 1.24 Some non-schools PFI projects have suffered delays and significant changes because clients identified the likely level of contract charges relatively late in the procurement process. In each PFI schools project examined the council recognised the importance of affordability as a key constraint from the outset and set and generally achieved targets for managing this aspect of the deal.

There is uncertainty about future school demand and capacity

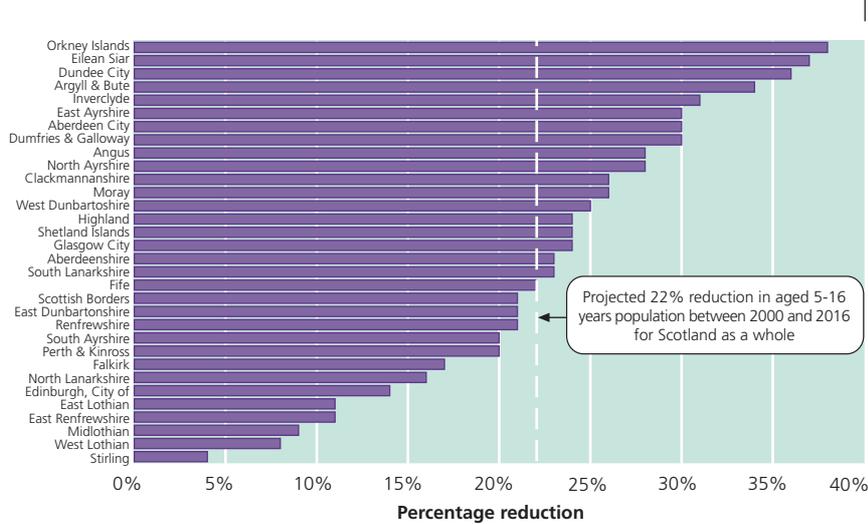
- 1.25 A common area of uncertainty affecting every PFI school project to date is the optimum capacity for each school, ie how many pupils does each school need to accommodate in the longer term. The necessary capacity determines how large or small each school building should be and ultimately how much it will cost to build (or refurbish) and to run. Capacity needs to be considered for any significant investment in school buildings, be it by PFI or other means, but there can be no certainty for forecasts of pupil demand over the 25 or 30 years PFI contracts. Uncertainty comes from several sources.
- 1.26 Firstly there is the impact of general demographic trends and the effect of social and economic development. The General Register Office for Scotland forecasts that the Scottish child population will fall markedly in the period up to 2025 (Exhibit 9), continuing a general downward trend since the 1960s.

Exhibit 9: Scottish population – national trends 2000 to 2025



- 1.27 However, at local level there is variation around this trend and population in some areas such as Edinburgh, West Lothian and Stirling are forecast to fall more slowly due to the impact of new housing, economic development and migration between areas. While the General Register Office has not prepared projections at council level beyond 2016, the data available illustrates the variations in growth between individual council areas (Exhibit 10). Within council areas, projections in the medium to long term for individual schools become more difficult. While the trend in a district or region can perhaps be predicted the more local impact in terms of school catchment areas cannot be forecast so accurately.

Exhibit 10: Projected reductions in school age (5 - 16) children 2000-2016



Source: Audit Scotland from General Register Office year 2000 based population projections

1.28 In addition to economic and demographic factors there is uncertainty arising from pupil and parental choice, as pupils may opt to seek education at schools outside the catchment area they reside in. Pupil numbers at a school that develops a particular good or a bad reputation may be significantly affected by pupil placement requests. For example, one PFI project school (Balfron High School in Stirlingshire) has had a good educational reputation for many years (despite the previous poor quality accommodation) and there is strong demand from children to be educated there. In recent years pupil placement requests from outside the school’s catchment have accounted for some 19% of the total roll, including many children from neighbouring West Dunbartonshire.

Education policy and development will impact on schools and their structures

1.29 As well as future demand issues councils and PFI providers need to take account of a wider set of issues in planning future schools provision. School buildings and facilities cannot be divorced from the educational activity that takes place within them. It is likely that during the 25 and 30 years PFI schools contracts there will be legislation and other shifts in educational policies that may affect how the buildings are used and what is required of them. Exhibit 11 summarises how recent provisions for special education needs and other legislation may impact on schools.

Exhibit 11: The impact of special education needs and other legislation

Section 15 of the Standards in Scotland's Schools etc Act 2000 included a requirement that the education of all children and young people, including those with special needs should be provided in mainstream schools, unless certain specified exemptions apply. The Executive has indicated in recent guidance (Circular 3/2002), that it expects to see a significant shift from the current situation.

The exact nature of any changes and other implications associated with the legislation, are not yet fully apparent. Audit Scotland is conducting a study into a number of the key issues concerned on behalf of the Accounts Commission and a report is planned for publication in 2003.

It is, however, already possible to identify a number of areas where there is potential for significant impact. Several of these will relate to school buildings and facilities. For example, a possible increase in children and young people with physical disabilities attending mainstream schools may require significant adaptations to buildings. There may also be additional accommodation required in schools for a variety of support facilities which children and young people with special education needs often require, eg on-site physiotherapy, quiet areas for pupils with social, emotional and behavioural difficulties, etc. Often this will involve the provision of additional rooms, but may also require more space in individual classrooms.

There is other recent or forthcoming legislation which may impact on school buildings and facilities, such as the new duties on education authorities which arise from Part IV of the Disability Discrimination Act 1995, and the requirements for improvement through accessibility strategies under the new Education (Disability Strategies and Pupils' Educational Records) Bill.

Source: Audit Scotland

- 1.30 As well as policy and legislative changes there is uncertainty about wider educational development in the long term. While supervised learning in some form can be expected to continue for the foreseeable future, what spaces will the curriculum being delivered in ten, 15 or 20 years require and how will information and communication technology affect schools? For example, one possibility is that pupils will undertake more learning in smaller groups with less direct and immediate supervision. If learning develops in this way there will be a need to use existing space more flexibly and more space may be needed in total.

Councils and private sector providers should co-operate to manage better uncertainty about future school demand

- 1.31 In summary there are inevitably difficulties for councils and PFI providers in addressing fully some of the issues flowing from the long-term nature of the PFI schools contracts. Under PFI while council staff (teachers) will continue to manage the core education service they cannot guarantee levels of usage over the 25 or 30 years PFI schools contracts. School size and pupil demand, and how the school can be configured to best meet uncertainty are areas requiring careful consideration in any school PFI contract.
- 1.32 Against this background all councils have chosen to remain responsible for deciding the maximum school capacity, and to accept liability for the additional costs if the chosen capacity does not match demand well. In four of the six cases Audit Scotland examined, for some of the schools included in each project, there remains no easy answer to the problem of achieving the optimum balance between pupil demand and available capacity in each case.

In these cases councils have made some over provision against forward projections rather than accept a risk of over crowding if projections prove to be understated.

- 1.33 There is scope in future projects for councils and private sector providers to co-operate to manage better the consequences of having to reconfigure schools accommodation. The Glasgow schools PFI project is an example of the forecasting and management difficulties arising in this area and how one council has responded (Exhibit 12). This shows there were strengths in the council's approach to managing the question of demand and capacity. It also details how councils and private sector providers might co-operate to manage better the consequences of having to reconfigure schools accommodation. As part of future PFI schools competitions councils should consider asking bidders to price an option for accepting the risk of reconfiguring accommodation to meet specified changes in levels of demand. Although there would be an extra price to pay for accepting this risk, comparison with the standard bid in each case would allow the risk premium attached to this to be quantified and evaluated.

Exhibit 12: Glasgow Schools PFI project – Managing demand risk

The key value for money driver for the Glasgow Schools PFI project was rationalisation of Glasgow's entire secondary school estate in order to move resources from unnecessary space to where they are most needed. The requirement for the PFI service followed the council's comprehensive strategic review of its secondary estate needs in response to a significant fall in school rolls in the city leading to substantial school over capacity. Implementation of the first phase of the council's strategy (before the PFI contract) led to substantial changes to catchment areas and the closure of nine schools between 1997 and 2000, reducing the secondary estate from 38 to 29 schools. Overall the PFI project is designed to match better the changed needs of this smaller school population.

The PFI project will result in a much better match between supply and demand than previously, though despite the careful planning for a few schools the total pupil roll is forecast to be 80% or less of the actual capacity provided under the PFI contract.

The fundamental principle of risk management is that risks should be allocated to those best placed to manage them, and Glasgow Council concluded there was no case in favour of seeking any acceptance of the "demand" risk by the private sector. The council is better placed than the private sector to manage general education demand risk, and in any event wishes to control all factors – including planned school capacities – that impact on education policy and strategy. However in this case the PFI provider does not carry reconfiguration risk, though it is in a better position to manage this risk than the council. Reconfiguration risk is the risk of additional costs arising from having to reorganise school accommodation to meet different capacity levels.

Source: Audit Scotland

To assist future projects there is a case for centrally led research on best practice in specifying school requirements in Scotland

- 1.34 As well as the total size/capacity required a further issue common to all PFI schools projects is what standard of accommodation is necessary to promote and sustain effective learning and teaching. For any significant investment in school buildings, through PFI or otherwise, the council as client must be ready to address issues such as:
- is it better to refurbish and reconfigure (either extend or perhaps partially demolish) existing schools rather than build new? Is there a need or would it be better value to build new, rather than spend money on obsolete or dilapidated existing buildings?
 - whatever construction approach is adopted, how many classrooms of each type (general, practical, laboratory, music etc) are needed? How should they be organised in relation to each other to promote effective organisation of the school? What other spaces such as halls, social areas, outside facilities are needed? How will the available space be used most efficiently?
 - because space costs money (both to build and then to maintain and operate) how big do rooms and other component parts of the school need to be?
 - what design standards are relevant and what is good practice in providing the school and classroom environment with regard to matters such as heating/cooling, lighting and acoustics?
- 1.35 These are important questions for any project, but they are complicated further in the context of PFI. Under PFI if a council as client puts too much emphasis on specifying inputs it may compromise the ability of the private sector to apply innovation and effective risk management in the design and delivery of school facilities. All other things being equal, over-emphasising inputs may reduce the value for money available from the PFI approach.
- 1.36 Accordingly the requirement for PFI schools projects is that each council should specify its requirements in “output” terms. That is, it should specify the level of service required from the provision of the managed school facility, rather than inputs in terms of requiring specific elements relating to particular construction, operation and maintenance features etc. For example an output specification would require the final building to be maintained at specified temperatures say 18°C during specified times but would not otherwise limit the choice of heating or cooling equipment and plant nor how this could be maintained.
- 1.37 Councils have adopted different approaches in how they respond to the task of specifying requirements in output terms. There has been some informal sharing of good practice between councils at different stages of the development of PFI schools projects. But overall there has been no clear source of leadership in Scotland on such matters. The intensity of school use and classroom size are two important areas where a consensus on the best approach has not been established.

The intensity of school use

- 1.38 Councils have adopted different approaches to determining the overall accommodation requirements for PFI schools.
- 1.39 One approach, adopted in three of six cases Audit Scotland examined is to determine the number of teaching spaces required by curriculum analysis. At its simplest this involves analysing the number of teachers at a school (which in turn is dependent on the number of pupils) and how much time they spend teaching individual subjects so as to predict the total number of teaching spaces (classrooms) required⁷.
- 1.40 This methodology provides a practical, systematic and defensible analysis of the main space required in relation to the forecast capacity of the school. Even with this approach inevitably some classrooms at secondary school level will be unoccupied for certain parts of the day – 100% usage is not practicable because of factors like curriculum choices and varying class sizes at more senior levels of learning. But an advantage of the curriculum analysis approach is that target utilisation factors can be set to help manage and minimise this aspect consistently. For example, a council may determine that it will seek an average general classroom utilisation figure of between 85% and 90%.
- 1.41 In the other three cases Audit Scotland examined a curriculum assessment model was not adopted and it was not evident that the total accommodation schedule for each school had been determined to maximise efficient use of the available space.

Classroom sizes

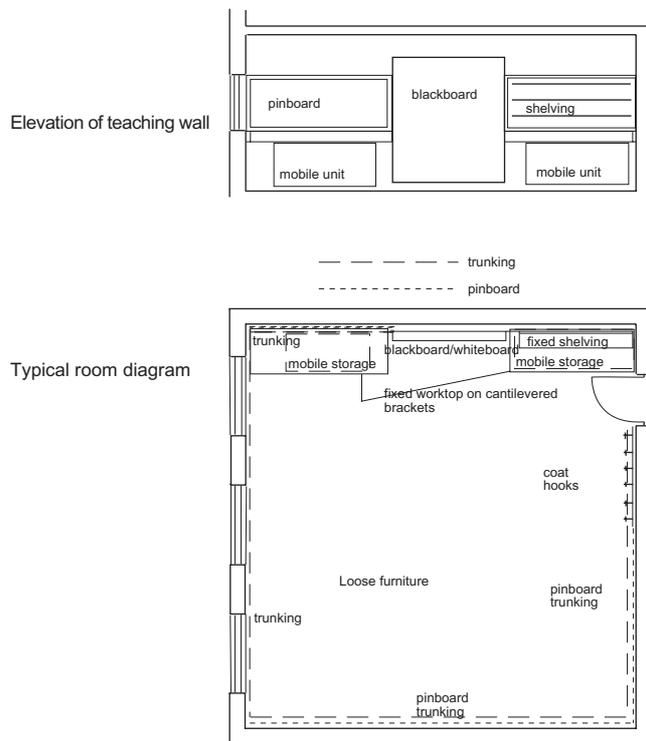
- 1.42 Similarly councils have adopted different approaches to the question of how to specify the necessary size of individual classrooms etc. In general, because of the requirement to express PFI school requirements in output terms, most councils have not specified any minimum classroom sizes. The following is an extract from a typical room specification for general classrooms in a PFI school project:

“The principal teaching spaces should create an identifiable zone for a whole class. They have to be flexible spaces allowing whole class teaching, small group teaching, working activities etc etc, to cater for a class size of 30 pupils. Space standards [should be] sufficient for good circulation around tables.”

- 1.43 Exhibit 13 is a typical “room datasheet” setting out a council’s required minimum performance standards for an English classroom in a PFI project school.

⁷ The approach is documented in ‘Area guidelines for schools’ published by the Department of Education and Employment in 1996. Although the advice is for schools in England the underlying principles of curriculum analysis can be and have been applied equally to Scottish schools.

Exhibit 13: PFI school datasheet – English classroom



Description: Principal space for teaching English, which should create an identifiable zone for whole class as well as being a flexible space allowing whole class teaching, small group teaching, working activities etc. Space to accommodate a class size of 33 pupils.

Special requirements: Finished floor/ceiling height – 2.8 metres minimum, clear or maximum height available in existing buildings to be no less than statutory minimum. Good even distribution of natural light with supplemental artificial light environment to standards set in the appropriate technical guidance.

Room acoustics must be such that teacher can be heard clearly from any part of the room. Solid core doors with minimum 150mm wide x 900mm deep toughened glass viewing panel or equivalent. Ironmongery suited, keyed and master keyed. Good acoustic separation between adjacent rooms and with external environment to standards set in the appropriate technical guidance.

Space standards sufficient to allow for good circulation around tables.

Persons using the room: Pupils, staff and possibly community.

Relationship to other rooms: Classrooms suited in groups according to curricular subject, close to departmental base and store.

Wall finishes: Durable, resistant to wear and easily cleaned. **Floor finishes:** Anti-static durable sheet carpet or linoleum bonded to substrate. **Ceiling:** Acoustic, demountable conforming to TMR Class 1, NCR 0.90

Fitted furniture and equipment: Shelving, blackboard/whiteboard, pinboard. **Loose furniture and equipment:** Mobile storage units, desks, tables, chairs.

Additional requirements: Daylight – reduce glare. Sunlight – control of solar heat gain. Windows – natural ventilation.

Mechanical and Electrical Services

Small power: Dado trunking to walls with 10 double socket outlets. For equipment, general purpose and ICT support. Each room to have a provision of two single socket outlets for cleaning equipment use, with a different socket configuration and connected to a circuit separately protected from the general purpose and ICT power circuits.

Computer networking: Contained within dado trunking, 6 no. outlets required each with Category 5 cable circuits and connectors. **TV/Video facilities:** TV aerial point(s) required for analogue and digital, terrestrial, cable (where available) and satellite broadcast services.

General lighting: 300 Lux average maintained illuminance at the working plane. Fittings to be recessed Category 2. **Specialist lighting:** none. **Emergency lighting:** to BS 5266.

Fire detection and alarm: to BS 5839. **Fire Defence equipment:** to meet the most stringent requirements of the Local Authority Fire Officer, the building's insurers and Health and Safety legislation.

Clock: Not required. **Period change:** Ability to hear period change signal, centrally mastered. **Telephone:** One point at teaching wall.

Room temperature: +20°C +/- 2°C when the outside air temperature is between -4°C and +25°C.

Room ventilation: To the latest edition of the Building Standards (Scotland) Regulations or better.

Heating: To required room temperature, radiators or other heat producing surfaces must be maintained with a surface temperature low enough to avoid injury to building users. **Cooling:** Natural ventilation to be maximised by effective design of opening windows. **Water services:** Not required. **Above ground drainage:** Not required.

Source: Audit Scotland

- 1.44 Although most councils have not specified room sizes for PFI competitions they have offered additional guidance to PFI bidders on what standards they would find acceptable. For example, one council had previously determined standard accommodation schedules including room sizes and made this available to bidders for information and not indicating there was a binding requirement to meet the standards.
- 1.45 In summary, the experience to date is that there is no established consensus on what constitutes a minimum acceptable standard of classroom space provision. Consequently there is significant variation in the area of accommodation provided in PFI schools. Exhibit 14 illustrates the position relating to secondary school accommodation for six PFI schools contracts.

Exhibit 14: Comparison of secondary space provision for six PFI contracts

	Total secondary school space	Total space per pupil place provided	General classroom (maximum class size 33)	Science laboratory (maximum class size 20)	Home economics food room (maximum class size 20)
Falkirk	56,020 m ²	9 m ²	59 m ²	67 m ²	77 m ²
Glasgow	321,217 m ²	10 m ²	60 m ²	70 m ²	80 m ²
West Lothian	36,895 m ²	10 m ²	50 m ²	65 m ²	80 m ²
Edinburgh	50,385 m ²	11 m ²	65 m ²	75 m ²	75 m ²
Balfron	13,500 m ²	14 m ²	70 m ²	90 m ²	90 m ²
Highland *	11,906 m ²	24 m ²	55 m ²	65 m ²	85 m ²
ADES **	N/A	N/A	50 m ²	65 m ²	75 m ²

* The primary and secondary schools in the Highland project will serve dispersed rural communities and provide additional community facilities. The delivery of Gaelic medium teaching in small groups also has an impact and the schools cannot achieve the economies of scale and space efficiencies obtained elsewhere.

** The Association of Directors of Education in Scotland (ADES) issued guidance in 1975 on area required per pupil. This was to help assess the maximum capacity of individual classrooms, to satisfy regulations to prevent overcrowding. The ADES guidance was not intended to provide a standard to guide any new provision.

Source: Audit Scotland

Technical requirements

- 1.46 Similarly there is no consensus or good evidence base on what are the optimum technical and environment output requirements for school buildings to promote good learning and teaching. Environmental considerations that may affect teaching and learning include lighting, acoustics and air quality. In the schools PFI projects that Audit Scotland examined each council's output specification used various standards and sources of standards but none were directly related to ideal conditions for lighting, acoustics or air quality etc. There has been no systematic assessment of evidence concerning best practice in the design/provision of good learning environments and what are the most suitable standards for guiding the provision of accommodation over the 25 and 30 years PFI contracts.
- 1.47 Consequently, and taking into account the likelihood of further significant schools investment in years to come, there is a case for centrally led research⁸ for example by the Scottish Executive to draw on best practice internationally and provide the basis for a consensus on minimum standards for school design in Scotland.

⁸ There is increasing international research on best practice in school design and specification. For example in 1997 the U.S. Department of Education created a National Clearinghouse for Educational Facilities (NCEF) as a free public service that disseminates information about school planning, design, financing, construction, operations and maintenance. One in every eight students in the USA are educated in California, where the state education authorities, energy authorities and utilities companies have collaborated with the aim of facilitating the design of high performance schools – environments that are not energy efficient, but also healthy, comfortable, well lit and contain the amenities needed for a quality education. In England the Department for Education and Skills (formerly the Department for Education and Science) produces a wide range of guides relating to schools design and operation.

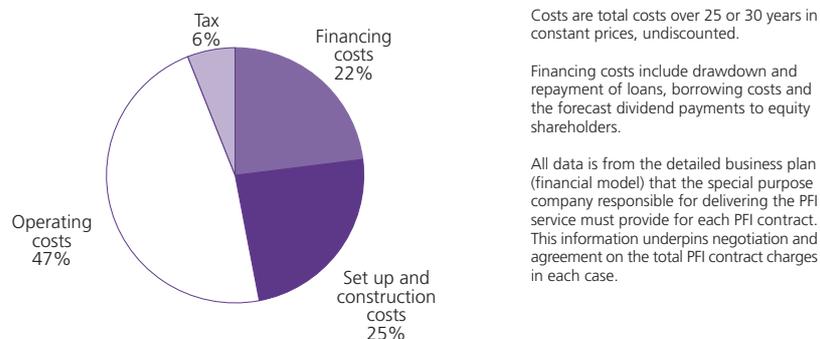
Part 2: Managing the procurement and delivery of PFI schools projects

There are significant challenges to both public and private sectors in PFI schools procurement

The scale and intensity of the investment associated with the projects is substantial

- 2.1 For most individual PFI schools projects the amount of initial construction investment is significantly larger than client councils have invested in education projects under traditional finance. In the largest cases the initial PFI investment is around ten times more than the council's total education annual investment before PFI.
- 2.2 The initial capital investment in the schools is only part of the picture. Once the contract is signed and the project schools are completed the full managed facility service may commence, which lasts 25 or 30 years. Typically initial capital investment accounts for only between one-fifth and one-third of the total (lifetime) project cost to the council (Exhibit 15). There is therefore a much clearer incentive to consider whole life costs than under traditional procurement, notwithstanding it is in an area where councils may lack experience or expertise.

Exhibit 15: Analysis of contract costs for six PFI schools projects



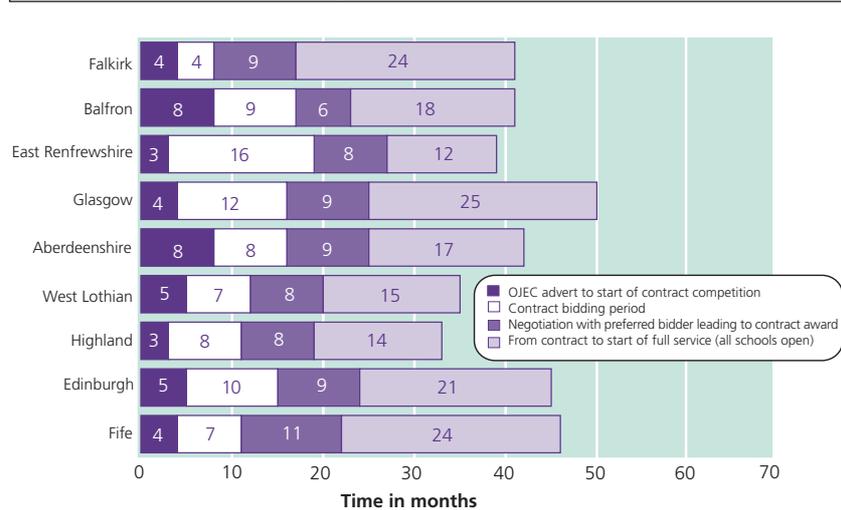
Cost element	Total cost for 6 projects		Range for 6 projects	
	Lowest	Highest	Lowest	Highest
Financing costs	£416 million	22%	15%	33%
Set up and construction costs	£464 million	25%	21%	30%
Operating costs	£898 million	47%	29%	55%
Tax	£118 million	6%	4%	11%
Total	£1,896 million	100%		
Less income from disposal of assets	-£41 million	-2%		
Total contract payments to PFI providers	£1,855 million	98%		

Source: Audit Scotland

- 2.3 As well as the cost of the project there is the time taken to arrange its procurement. Each PFI school project has taken between some three and four years to progress from inception, through the tender competition and

contract negotiation and completion period, to commencement of the full service in new or refurbished accommodation. Exhibit 16 summarises this elapsed time for nine projects that had reached contract completion at the time of preparing this report (including planned not actual service commencement dates in most cases).

Exhibit 16: PFI schools – Overall procurement times



'OJEC advert' is the start of the procurement process. It is the date when the PFI contract competition is advertised in the Official Journal of the European Communities. Readers should keep in mind the variation in the size and complexity of these deals and the developing nature of PFI over the period between the first deal (Falkirk) and the latest to be signed (Fife).

Source: Audit Scotland

2.4 The scale of PFI investment in the education sector is unprecedented, at least in recent years. But three to four years from inception to full service commencement appears to represent a reasonably rapid period for delivery of major infrastructure renewal in the public sector. Within this, the contract bidding and completion period can be anything between one and two years duration, which is longer than necessary under other forms of procurement. Nevertheless once a PFI school contract is signed, despite the scale and the attendant risks, the major construction works must be completed rapidly, within one to two years. As discussed in Part 3, while it is too soon to have good evidence about many contract outcomes, the construction of projects so far are coming in on time and without significant additional costs for councils.

There is a great deal at stake for both the client and the provider, financially and non financially

2.5 For the procurement of each prospective PFI school contract the council as client must research, formulate and communicate its output requirements accurately, clearly and with commitment from the outset. It must organise the complex tender competition and negotiation procedure and the associated contractor selection evaluation and review process.

2.6 Potential PFI schools providers must understand the council's output requirements. A range of entities with different specialisms are involved in the preparation of each bid but the efforts of all parties must be coordinated and made a coherent whole. Potential PFI schools providers must propose a commercially viable, competitive and ultimately binding response within a specified tender period.

- 2.7 All of the projects involve some council staff transferring to new private sector employers, which adds a further dimension for both sides to manage.
- 2.8 At all stages the council must communicate with a wide range of stakeholders and ensure the usual requirements of democratic accountability and decision making are satisfied. Equally, during the tender and negotiation period, confidentiality must be protected in the interests of securing good and fair competition.
- 2.9 Once procurement is completed the client must monitor service delivery (including progress during the critical construction phase) and be satisfied that the service is provided effectively in accordance with contract standards.

In general councils have managed the processes well, consistently with good practice

Councils have implemented strong project management and governance procedures

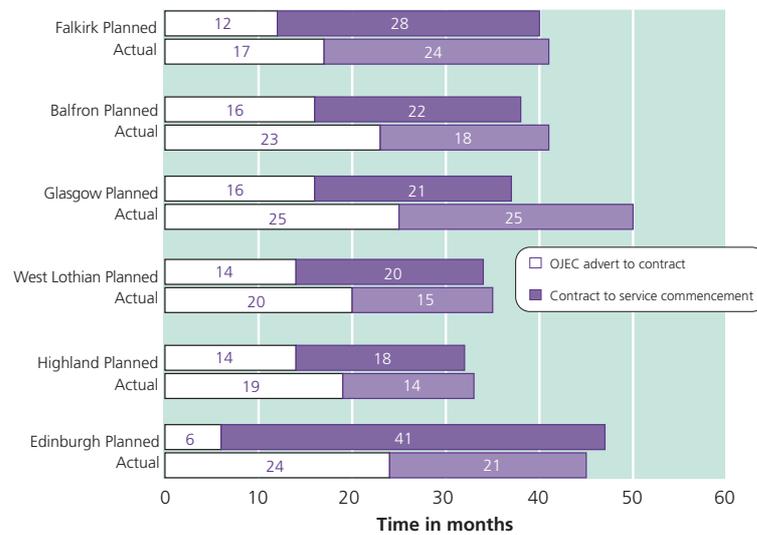
- 2.10 Audit Scotland's work confirms that the councils completing PFI schools projects have generally done so by implementing strong project management and governance procedures. Typically, in accordance with good practice, council staff have established formal project steering groups to oversee each project and to ensure a strategic overview. In all cases these steering groups have including senior council staff, ie, directors and including the chief executive or equivalent in some cases. In some cases these steering groups have also included representatives from the wider community, such as local Community Council representatives and school board representatives.
- 2.11 Reporting to the steering group and with day-to-day responsibility for progressing each project, councils have established a project team, typically with a core membership of around five or six key council staff. A full-time project manager or leader, in some cases selected after internal and/or external competition, is accountable for the effective progression of the project.
- 2.12 Another feature of good practice in most of the projects has been a high standard of regular written analysis and reporting between the project team and the project steering group, in addition to the standard reporting requirements at key project stages, which is necessary for all PFI projects. Documentation standards at this more detailed level did vary though, and for any future projects council project teams should review and determine at the outset the standard of internal reporting to be achieved. Maintaining good records of the development of the project and key decisions taken should promote accountability and effective decision-making.
- 2.13 In all cases Audit Scotland examined, in accordance with the normal requirements, council staff ensured that council members were properly briefed on the progress of each PFI schools project. In Audit Scotland's opinion, in general the information presented to members appeared good and sufficient to inform decision-making at the key stages. Project teams adopted various devices such as informal presentations or the opportunity for members to attend steering group meetings, where members wished to supplement the information otherwise available to them regarding each PFI project.

- 2.14 Usually the contracts involve the transfer of staff employed as janitors or cleaners for the project schools, and may include catering services which will increase the number of staff obliged to transfer to the private sector. Councils and PFI providers appear to have managed these transfers effectively, with due consultation with the staff involved. In each case there are guarantees written into the PFI school contract to protect existing terms and conditions of staff transferred for a period of five years from transfer. There have been no substantial disagreements such as legal challenges related to the transfer process in any case examined by Audit Scotland.

Councils have run the large and complex procurement competitions systematically and successfully

- 2.15 As indicated above there are significant challenges to council project teams in preparing the ground for and subsequently implementing the procurement processes for each PFI schools project. In each case Audit Scotland examined, the council team has progressed matters effectively.
- 2.16 In general the PFI schools procurement process is intensive for all concerned. There is sustained pressure and many detailed and complex issues to address within externally driven deadlines, resulting in long working days for much of the duration of the project. Some councils commented to Audit Scotland that they considered a strong, formalised project management structure was an important safeguard which helped promote overall effectiveness. Against the significant pressures a structured approach helped to ensure sufficient resources were available to meet the necessary workload and that key decision makers were fully and properly involved in the process. This is in accordance with advice on good project management practice that HM Treasury and others make available.
- 2.17 In all cases councils have, at the very outset, established timetables for controlling project progress. In most cases the initial timetables proved very optimistic and were not achieved in practice (partly because of factors outside the councils' control, such as the timing of the Scottish Office's decisions on offers of level playing field support). Councils have later taken stock, generally before commencing the market testing process proper. They have largely succeeded in delivering the revised and more realistic procurement timetables. The exception is that all PFI schools projects have experienced some delay against revised targets during the final pre-contract negotiation stage – this aspect is considered further below. Overall, though, most councils and PFI providers are completing or expecting to complete projects within a few months of their original timetable goals (Exhibit 17).

Exhibit 17: Planned and actual procurement times for six PFI schools projects



'OJEC advert' is the start of the procurement process. It is the date when the PFI contact competition is advertised in the Official Journal of the European Communities. For the Glasgow, West Lothian, Highland and Edinburgh projects schools are in course of construction and "actual" contract to service commencement dates are those specified in the contract.

Source: Audit Scotland

- 2.18 Because of the financial, technical and legal complexity of the PFI schools projects there is a need to obtain external advice and assistance in all cases. For all the projects that Audit Scotland examined the councils had appointed, after competition, external legal and financial advisers. In most cases the councils had also appointed construction and building maintenance advisers, where the necessary technical expertise and relevant experience in this area was not available in-house.
- 2.19 Whilst external appointments had been made after competition in all cases, the basis of these contracts has varied between projects. In the early PFI schools projects councils appointed advisers on the basis of hourly or daily remuneration rates and estimated time to complete the work. Invariably, and reflecting the uncertainty on all sides for these early projects, in each case significantly more advice than initially expected proved to be required. Consequently in these cases overall fee costs have been greater than initially forecast, by between approximately 80% and 200% more than the initial forecast costs.
- 2.20 With the benefit of experience from earlier projects councils have subsequently sought and have been able to obtain bids based on lump sum fees for component elements of the advisory work. Appointments after competition based on lump sums for specified elements of work are likely to promote better value than the earlier arrangements, though they do not guarantee cost certainty for a council. This is because councils may not anticipate fully all the necessary work, or later in the procurement process they may choose to appoint advisers for work they originally anticipated their own staff would complete. In two of the three projects Audit Scotland examined subject to lump sum pricing, outturn costs were only 7% and 10% more than the initial forecast, though in a third case the final costs were 79% more than forecast because of additional work.

In keeping with good practice and the achievement of value for money there appears to have been good competition for the PFI schools contracts

2.21 For the PFI schools projects, as with any procurement decision, a successful competition is essential if value for money is to be obtained. In a successful procurement, competition between potential providers promotes innovation in the means of delivering the council's requirements and gives assurance that the price to be accepted is economic and that the service offered is the best that can be obtained consistent with what the council can afford.

At the pre-tender stage

2.22 A successful competition requires there to be sufficient interest in the market from the outset to provide the necessary tension between bidders, combined with clear communication by the council concerning the service it requires.

2.23 The evidence from the six PFI schools projects that Audit Scotland examined in depth is that councils have created satisfactory market awareness of each project and there is generally a good market appetite for them. Typically for each project, following initial advertising to obtain expressions of interest, councils have organised a bidders' conference or open day to promote and gauge interest. Subsequently in most cases councils have had no difficulty in selecting the required number (three or four) well qualified bidders following pre-qualification⁹ submissions from between eight and 14 consortia.

2.24 Tender lists should be as short as possible consistent with the objective of receiving sufficient compliant tenders and achieving effective competition. Where, as in PFI schools projects, the tender requirements are large and complex the case for keeping tender lists short is that not doing so may impose unreasonably high costs on the tenderers and undermine effective competition and value for money in the long run. For this reason HM Treasury advises that for PFI contracts there should be no more than three or four contenders on the final tender list.

2.25 The private sector consortia involved in the PFI schools competitions generally include major UK and Scottish construction and building services and maintenance companies. For the purposes of bidding these consortia join with major UK financial institutions who can offer the necessary project finance. Councils seem correspondingly well placed to benefit from the significant competitive pressure resulting.

2.26 In one PFI schools project examined there was a question mark about the strength of the underlying market interest. In this case only five consortia applied for pre-qualification and the council subsequently eliminated two as insufficiently qualified after assessment. Nevertheless in this case the council was able to select three contenders for bidding and Audit Scotland has concluded that overall there was adequate competitive tension between the bidders during the subsequent progression of the project.

2.27 This case emphasises the importance of councils reaching balanced decisions at the outset about the advantages and disadvantages of PFI and other procurement options. The risks of being unable to secure a good degree of

⁹ Pre-qualification is the process of assessing potential tenderers for their general skills and competencies, to establish their suitability to undertake the contract work. It is intended to ensure that all those invited to tender are capable of performing to the required standard, are of sufficient standing and have established skills, integrity, responsibility and competence or are capable of obtaining these from suitably qualified sub-contractors.

market interest for a PFI project is a relevant factor to consider, which may mean an alternative procurement path to PFI may offer better value.

The competitive bidding period

- 2.28 During the main tender period prior to selection of the PFI preferred bidder in all cases Audit Scotland examined there appears to have been good competitive tension.
- In each case, with careful preplanning the council established structured, systematic processes for communicating with bidders and obtaining their proposals, under the normal arrangements to ensure fair and equal competition between bidders. The actual bidding period varied between four and 12 months in each case, depending on the complexity and scale of the project and the need to negotiate under continuing competitive tension aspects of each bidder’s proposal so as to secure the best possible proposals in each case.
 - In accordance with the predetermined competitive processes and selection criteria in each case, councils made systematic and comprehensive assessments of the technical, financial, educational and legal aspects of each proposal. Audit Scotland noted that there was good evidence supporting the selection of the winning bidder in each case, giving confidence that the PFI contract competitions were rigorous and fairly implemented.
 - In most cases examined, after an initial bidding period involving all three or four selected tenderers submitting comprehensive written proposals, the council introduced a further “best and final offer” bidding round before finally selecting the winning bidder. This final round was restricted to two or three bidders, who had given evidence of superior proposals in the previous bidding round, with an objective for the final round to obtain clarification and further improvements in the proposals under conditions of continuing competitive tension.
- 2.29 Exhibit 18 summarises some key statistics concerning the outcome of the competition stage for six PFI schools contracts, indicating the good degree of competition achieved.

Exhibit 18: Competition for six PFI schools contracts

Project	Number of organisations making pre-qualification submissions	Number of organisations competing in pre-qualification interviews	Number of bidders selected for the main PFI competition	Number of bidders invited to submit best and final offers	Financial margin in favour of the preferred bidder at the close of the main competition (%)
Falkirk	9	6	3	–	13%
Balfron	14	6	3	2	18%
Glasgow	21	13	4	2	2%
West Lothian	8	5	3	2	8%
Highland	5	3	3	3	3%
Edinburgh	8	8	4	2	3%

Note: There was no best and final offer stage during the Falkirk schools PFI competition.

Source: Audit Scotland

The final pre-contract negotiation

- 2.30 While the initial phase of the PFI schools procurement process is competitive, before any contract is signed there is a need under PFI for one-on-one negotiation between the council and a single preferred bidder. This is to finalise the terms of the complex PFI contract and to allow those providing project finance to complete various financial and technical tests as safeguards before committing the substantial funds involved. Councils need to guard against the risk of adverse changes to the project during this final negotiation period when competitive tension is not present to any significant extent.
- 2.31 All PFI schools projects examined have taken longer than planned to complete this phase and reach contract signature stage. Typically this period has taken six to nine months (Exhibit 16), whilst diverse technical, legal, commercial and financial aspects are resolved. In the cases Audit Scotland examined the process generally took about twice as long as had originally been expected.
- 2.32 Nevertheless the evidence from Audit Scotland's work is that councils have carefully controlled the final pre-contract negotiation phase after competitive bidding, to ensure the benefits of competition are maintained and preserved within the final contract. For the most part councils have ensured there was no significant adverse change in the contract terms or costs in this period, despite the risk of this from the absence of competitive pressure.
- 2.33 In each case Audit Scotland examined there was evidence of careful control and consideration by the council project team and their advisers of changes in the detailed commercial terms that developed during this period. The largest variation in the expected cost of the contract during this period concerned Glasgow, where the forecast total cost of the contract increased by 6% during final negotiation. The largest part (4%) of this increase was the result of a combination of an increase in prevailing interest rates, which was outside both parties' control, and extra provision required by the council. In the other cases examined changes in the cost of the contract in this period were between 3% and -4%.
- 2.34 A complicating factor affecting this phase of each contract is that extending the time to complete negotiation leading to the PFI contract creates the risk that the start of construction and other works is delayed, which in turn would prevent the full PFI service starting by the agreed date. The knock on effects of this delay (eg on the PFI provider's expected cash flow) may create a vicious circle, so there may be a need to re-open negotiation of related contractual matters (eg the operation of the payment system), risking further delay in contract completion. In some cases because of the impact of delay councils have entered into various preliminary agreements with their preferred bidder, in order to help achieve the planned start date. Whether this is the best commercial way to proceed in each case is a judgement for the council's senior officers and project team. But entering into such commitments in advance of the main PFI schools contract could limit the ability of a council to maintain negotiating pressure on the preferred bidder when conducting final pre-contract negotiations against a tight overall completion timetable. A lesson is that councils should avoid setting over tight delivery targets at the outset of a project because they can become counter-productive for all sides at the later critical phase of the procurement process.

- 2.35 Recently, in 2002, the Scottish Executive in association with Partnerships UK prepared and published a Scottish standard PPP schools contract. The intention of the standard contract is to present a document that can be used as the main basis for contracts, so shifting the focus of negotiations to any bespoke terms and conditions that are required to address local circumstances. In publishing a standard schools PPP contract the Executive's key aims are to create commonality and hence familiarity, to reduce procurement times so enabling services to be delivered sooner and to reduce bid costs. This initiative should contribute to further reducing the risk of adverse change for councils during the final negotiation stage with prospective PFI schools providers.

The PFI competition process is promoting best value not just lowest price

- 2.36 For PFI schools the competition process reinforces the requirement for councils to be clear about quality, service and whole life cost and to appraise and select bids accordingly. This has necessarily produced a tension between what could be afforded in each case and desirable investment and service levels. In some of the cases Audit Scotland examined, councils have had to cut back the scope of work being sought, but in each case councils have regarded such reductions as not affecting the core service and being in the overall best interests of the project. Where reductions have been made the evidence does not indicate that there has been any undue emphasis on price to the exclusion of other proper considerations. Councils appear to have made balanced judgements in such areas helped by the clear emphasis under PFI on specified standards of service.
- 2.37 Part 3 reviews more fully the available evidence on the benefits of the PFI procurement for schools.

Councils and the Executive should explore ways to ensure hard won experience on signed PFI schools projects is fully applied to others

- 2.38 Many educational, financial, technical, managerial and contractual questions have to be answered as part of each PFI schools project. Particularly in the earlier PFI schools projects there were inevitably areas where no precedent or experience existed on either the client or the operator side. Both sides have developed schools PFI procurement skills and solutions project by project.
- 2.39 There is a risk that council procurement skills, and the knowledge base more generally, will be lost as each contract is completed. Councils are reducing this risk by retaining experienced staff for the next round of "PPP2" projects and by informal networking between project leaders; indirectly consultants also help share knowledge between council clients. But there is no systematic sharing and development of skills and knowledge in the area of PFI schools procurement and management.
- 2.40 The Treasury Task Force or its successor Partnerships UK has assisted four of the 12 current PFI schools projects but eight projects have not benefited directly from this source of specialist PFI advice and assessment. The Scottish Executive PFI Unit oversee and provide general advice about PFI projects in Scotland, including schools projects. Bearing in mind the scale of prospective new schools investment over the coming years the Scottish Executive should consider developing a clear leadership role in this area.

- 2.41 Areas where further knowledge development and sharing may be helpful are: specifying school requirements (Part 1 above); tender process design, timetabling and documentation; innovation in school design and utilisation models; estimating construction costs (new build and refurbishment); life cycle maintenance models and costs; school operating and facility management costs and patterns; risk analysis methodology; sharing information about cross-boundary needs and opportunities for packaging projects across boundaries.

Part 3: PFI schools and value for money

What is special about PFI?

- 3.1 There is extensive public interest and debate about the relative advantages and disadvantages of the private financing of public services. Our approach has been to accept that in general the PFI offers the possibility – but not a guarantee – of superior value for money compared to conventional procurement.
- 3.2 Exhibit 19 illustrates some of the broad considerations arising, affecting PFI projects in general, that Audit Scotland considered as part of its scrutiny of individual PFI schools projects. Some factors are more relevant to the education sector than others.

Exhibit 19: Advantages and disadvantages of the PFI

The private finance initiative offers the possibility of superior value for money

- **Innovation in how services are delivered.** The client specifies what is required not how it is to be delivered and competing suppliers have the scope and the incentive to innovate to provide the best service at lowest cost.
- **Better management of the risks associated with projects.** The principle in private finance deals is that risks are allocated to whichever party is best able to manage them. For example, in a contract for accommodation services over 30 years the company responsible can better manage the risks of providing and operating the buildings at lowest cost. They are best placed to ensure at the outset the building design minimises whole life costs. Later, if necessary, they can mitigate the risk of higher than expected maintenance and energy costs by further changes to the building fabric or the way it operates.
- **Better management.** A private finance contract can be a method of finding the most effective management team for a particular service.
- **Stronger financial control.** Banks and investors protect their long-term investment in respect of the construction and operation of a private finance contract by setting specific financial tests and limits for the private contractors responsible for delivering the project. The same controls have not traditionally been applied to publicly funded projects, which experience shows tend to suffer delays and project cost overruns.
- **More effective exploitation of opportunities.** Sometimes a commercial opportunity arises in parallel with providing public services. Public sector bodies have traditionally lacked the skills needed to make the most of these opportunities. With private finance, the private sector supplier's ability to exploit commercial opportunities can be harnessed.

But a good PFI deal does not guarantee best value for money

- **The benefits of innovation and risk transfer may be inadequate to offset the higher cost of private finance.** The opportunity for innovation in a project may be constrained and risk transfer may not be easy to achieve at a reasonable price.
- **Service levels may be reduced to compensate for higher finance costs.** It is possible that clients will accept reduced service levels in order to make the PFI deal affordable.
- **Avoiding capital outlay today at the expense of revenue commitments tomorrow.** When funds are tight, private finance looks attractive because the client avoids investment up-front, but there are longer-term public expenditure commitments in the form of contractual payments to the private sector service provider. These commitments will constrain clients' future public spending decisions and reduce flexibility. There is a risk that clients may accept private finance deals that do not offer value for money in the long run.
- **The PFI deal may simply be too expensive.** A good specification of requirements and a competitive procurement process may still yield a PFI deal that is too expensive. Clients must ensure that their evaluation of the cost of conventional public procurement provides a reliable benchmark against which to judge the cost of the PFI deal.
- **The costs of managing the more complex procurement process are high.** Because the process is considerably more complicated than conventional procurement, the costs of procuring and negotiating private finance deals can be significantly greater. Clients must therefore maintain tight control over their own costs and those of their professional advisors.

Source: Audit Scotland

- 3.3 This part of the report examines the specific evidence about the effectiveness and value for money that councils may reasonably expect to achieve from the PFI schools projects. In particular it examines:
- the evidence concerning the overall outcomes of the PFI schools projects so far available, especially the progress of construction works and the quality of facilities management achieved.
 - the qualitative evidence concerning what benefits there may be from PFI procurement of schools compared to traditional procurement.
 - similarly, what disbenefits may be identified.
 - the quantitative evidence concerning the comparison of costs of the PFI project with a public sector comparator that councils have prepared for each case.

The evidence to date on key deliverables is positive

- 3.4 PFI schools contracts deliver comprehensive facilities management services over 25 or 30 years after an initial construction phase to provide the new or refurbished project schools. Nine PFI schools contracts have been signed to date but only three projects have so far completed the initial construction phase prior to the commencement of the main service period. The contracts are all at an early stage of their lives and whether the contractors can provide the necessary consistent quality of service without unforeseen extra costs or complications over the full period can only be judged as the contracts roll forward.
- 3.5 Audit Scotland examined in depth two projects (Falkirk and Balfour) that have so far commenced full service delivery and a third project where construction work was well advanced and some new and refurbished schools had opened (Glasgow). Regarding the core construction work the evidence of outcomes that is available for all three projects so far indicates that the PFI providers have delivered the required new/refurbished schools rapidly, largely on time, and without significant cost changes for the client. Bearing in mind the scale of the construction works this is an important achievement.
- 3.6 Regarding the subsequent delivery of the facilities management services again, while it is early days, the available evidence suggests PFI providers are providing a satisfactory service. Exhibits 20 and 21 illustrate the evidence on this aspect for two projects where construction is wholly complete.

Exhibit 20: The delivery of service so far for the Falkirk Schools PFI contract

Core accommodation services, including management and maintenance of the buildings

Following completion of the five new schools it was the PFI provider's responsibility to deliver the full PFI managed facility service from the due date, 20 August 2000. The council established a team to lead supervision and monitoring of the PFI provider's performance, to confirm satisfactory delivery of the contract obligations and as the basis for approving regular contract payments to the PFI provider.

The PFI contract is "self monitoring" in that the PFI provider is responsible for providing and reporting quality assurance aspects. There are regular meetings between the PFI provider, the council, individual schools and individual providers responsible for service (under contract to the PFI provider).

The foundation for service monitoring and reporting is the PFI provider's helpdesk service, which receives, progresses and reports all service requests from schools and any problems. Failures to provide service must be remedied within specified periods and failures will lead to payment deductions, and ultimately for serious non-performance may lead to contract suspension or termination.

In the initial four months of the contract service period there were four or five helpdesk calls every day (covering all five schools). This seems to have reflected "snagging" problems and the inevitable disruption from the introduction of new services in new facilities. Since then the level of problems has reduced and calls to the helpdesk are now averaging less than one a day in total (or no more than five or six calls each school each month). Deductions from contract payments for service failures of the first year of the contract are low, 0.2% of the total value of payments otherwise due.

Catering

The PFI provider is responsible for providing a full school meal service for the five PFI project schools. It must provide meals of a specified standard and the council pays them an agreed amount for each meal actually provided. Pupils, teachers and other customers pay for meals using a charge card system, which the PFI provider administers though the council retain all income.

Monitoring to date has reflected the fact that catering is a demand led service and pupils and teachers will vote with their feet. Feedback to the monitoring team from teachers and pupils has indicated schools are very pleased with the service provided. Overall demand for meals is up 16% compared to the previous average for the five schools, and the uptake of free school meals has increased significantly.

To put this in context, where there has been recent investment in new catering facilities and a swipe card system in other Falkirk Council (non-PFI) schools there have also been increases in take up.

Cleaning and site supervision

Cleaning services standards that the PFI provider must achieve are specified in the contract. Though there is a subjective element to monitoring, feedback from users and occasional inspections by the monitoring team indicate that the PFI provider is achieving a satisfactory standard. In practice the schools look "cleaner" because they are new, and the monitoring team considers that the PFI provider is providing a service that is equivalent to the service previously provided by the council's Direct Service.

Similarly, janitor/site supervision services standards are specified in the contract. The level of service required is in principle the same as for non-PFI schools, though the PFI provider has introduced new ways of working and site supervisors no longer report directly to senior teaching staff. While some teaching staff perceive an element of lost service from the new arrangements, overall the council considers the PFI provider is supplying the correct level of service in accordance with the contract.

Source: Audit Scotland

Exhibit 21: The delivery of service so far for the Balforn High School PFI contract

Core accommodation services, including safety and security services and management and maintenance of the buildings

Towards the end of the construction period it became clear that 100% completion of the construction works consistent with service commencement due on 15 August 2001 could not be achieved. While by far the greater part of the construction work had been completed satisfactorily in a few areas work was incomplete. The areas affected were: completion of part of the sports wing; an external playground and classroom; a minibus garage and aspects of the information and communications technology service.

These difficulties resulted in handover of the school to the council on 21 August 2001, six days late. Although the school was able to organise matters to operate without serious disruption or difficulty the availability of the school facility was not as required and the council made reduced payments to the contractor over the following month until the specified outstanding works were completed.

Excluding the delay in completion of construction, the service under the PFI contract appears to have been substantially as the council required. However, while the available evidence suggested the PFI contractor was generally delivering as required, the position was not clear cut and until January 2002, reflecting a continuing focus on resolving construction related aspects, the contractor's reporting of other aspects of service performance and the council's own review arrangements were not fully systematic. The council has since introduced improvements to provide more deliberate emphasis on actual performance and availability achieved under the contract.

Catering

The PFI provider is responsible for providing a full school meal service for Balforn High School and pupils of the neighbouring primary school who use the facilities in the new school. Pupils, teachers and other customers pay for meals using a charge card system, which the PFI provider administers though the council retain all income. The PFI provider must provide meals of a specified standard and the council must pay them an agreed amount for each meal actually provided. It appears that in general teachers and pupils are very pleased with the service provided.

Cleaning and site supervision

Cleaning services standards that the PFI provider must achieve are specified in the contract. At the very outset of the contract, probably reflecting the incomplete construction works, the school reported that some areas such as corridors and stairs were dirty and the PFI provider subsequently organised a thorough clean of all the affected areas. Since then the service has been satisfactory.

Similarly, janitor/site supervision services standards are specified in the contract. In general the correct level of service has been supplied satisfactorily in accordance with the contract.

Source: Audit Scotland

- 3.7 In terms of how users regard the new PFI schools there is no strong evidence such as opinion survey data. There has been public and press comment and concerns raised about some aspects of the performance of the PFI providers and their contractors during the construction phase of some projects, highlighting its disruptive affects on teaching and learning activity and the management of health and safety. But the evidence from councils' monitoring suggests the issues arising are not exceptional taking into account the scale and complexity of the works involved. Where difficulties have been experienced and complaints made the contractors have rectified the position to the satisfaction of each council. Feedback from councils and from Audit Scotland's informal discussions with teachers at the new facilities indicates that teachers and pupils have in general welcomed the improved accommodation and level of service that has come on line so far (Exhibit 22).

Exhibit 22: User views on PFI schools accommodation and service quality

Design aspects

"Although there is much said about innovation in PFI the designs produced by the various bidders were not particularly innovative. One of the bidders produced a good design and an impressive model but was not prepared to listen to the schools concerns about aspects of the design they did not like and other aspects where it was clear that the design would not work properly. The winning bidder started with a much less developed design, almost a blank sheet of paper, listened to what the school needed and responded effectively. Where PFI scores is in a process where the designers are prepared to listen and respond to what the school tells them about its requirements."

"There were intensive discussions between the PFI designers and builders, school staff and the council project team concerning various design aspects. It was a groundbreaking process and the time pressure and the commercial element of the PFI deal introduced additional complexity. The results are a fair compromise for all concerned, although there was a lot of discussion and looking back there could have been benefit from earlier direct contact between teachers (as users) and the PFI designers."

"The school did not have a good deal of input. The council's approach was essentially hands-off – we are asking the company to design to meet our requirements, let them get on with it. The school was informed about the specification, not given the opportunity to influence it. The school was able to submit change requests – but nearly all were rejected. This was a missed opportunity because some changes would be relatively cheap and easy to implement during construction but not later."

The transitional period

"Overall the PFI provider had handled this inevitably disruptive period very well. Transition was challenging because the footprint of the new school extended into the old and one wing of the old school had to be demolished before the new school was ready. This resulted in a very tight 18 months – people putting up with a difficult situation – as education continued in the old premises."

"Once construction work started the school couldn't fault the contractor. Their project manager was superb, he constantly communicated and could not have done it better. Excessive noise was managed well (out of hours work) though obviously some disruption could not be avoided."

"The move into the new building went relatively smoothly although when the staff and pupils moved in cupboards weren't shelved and there was a lot of dust about which was setting off smoke alarms."

The new facilities

"Overall the new school is a very good facility. There is superb furniture and the school is light and bright."

"There is a substantial benefit to teachers and pupils of moving away from the former main school site, where the split from the rest of the site was highly inefficient and presented safety worries. The bright, fresh new/refurbished accommodation for everyone has boosted confidence and school spirit, despite inevitable difficulties during the transition period."

"The perception at the school is that the PFI project has provided generally high quality facilities, both in the new build and the refurbishment work. There are very high quality practical teaching areas and specialist provision is similarly very good."

"Teachers and pupils value the high quality facilities provided, though they have had to come to live with the comparatively tight space within the new build general teaching areas. It has also been too hot in some rooms and there seems to be no simple way to avoid this problem."

"One complaint concerns storage, which is definitely on the low side. The English Department, for example, was used to having walk-in storage for books. But the new facilities provided are not very adequate – essentially worktops in classrooms, some shelves and cupboards in teacher bases. The school's Art Department has now come up with a better storage system."

Facilities management

"There have been problems with room dividers in the contract and a widespread failure of these. Under a traditional contract they would have been purchased by the council and if they had failed this would have been hard luck. Under PFI, the PFI provider has to sort this out and provide something fit for purpose, with no additional cost to the school."

"There is good and very good satisfaction at the school with the catering service (where take up is substantially improved), the cleaning services and the general standards for building maintenance and repairs. There are some reservations amongst teachers that the scope of the janitorial service has been reduced in areas such as supporting mail distribution, banking, bus supervision and occasional pupil support."

"School staff are very impressed with the speed of response of the facilities management (FM) team. There is a clear process for reporting. Staff don't realise that exactly the same arrangement applied previously. But the PFI contract has raised the profile. Staff have access to the transition specification for FM – they know what they are entitled to and they ask for it when it isn't there. The janitor is able and keen to demonstrate a good standard of work."

Source: Audit Scotland interviews with teachers and senior teachers

- 3.8 While the overall picture is positive there are a few questions about some aspects of quality that have become apparent in the schools completed so far. Essentially these appear to be questions about whether the council's output specifications were completely right, not whether the PFI providers are delivering their obligations (Exhibit 22).
- 3.9 In the light of these questions councils implementing PFI schools projects should ensure that post-implementation reviews – which are good practice for any major procurement project – include arrangements to gain early feedback from users on the quality of the facilities. This should help identify lessons relevant to future major schools procurement, by the same council or others.

Councils should adopt a deliberate approach towards management of the main service delivery phase of each PFI schools project

- 3.10 Performance reporting underpins the payment mechanism and PFI schools contracts are “self-reporting” in that there is a requirement for each PFI provider to self-regulate, provide quality assurance and to report performance to the council. Because payment is dependent on successful service delivery PFI providers are incentivised to deliver the full contract service from the due date.
- 3.11 But, despite the incentives, the PFI provider cannot guarantee success in delivery and councils as clients should consider a strategy for managing any under performance. In each case the PFI provider has priced for risks arising from construction difficulties and during subsequent management of the schools, and may be rewarded or suffer additional costs depending on actual performance. It is important to the whole integrity of the PFI process that councils as clients hold the providers to their contractual commitments.
- 3.12 It is also important to develop good working relationships and avoid adversarial relations between councils and PFI providers. Consequently there is a need for each council to have a clear strategy for managing any under performance by the PFI schools provider. As part of this each council as client:
- should have in place a commissioning and monitoring regime that tests and confirms the accuracy of the provider's reports
 - should consider in advance what are the best options for addressing serious under performance if it should materialise, particularly during the critical construction phase.

There is evidence of real benefit from schools PFI compared to traditional procurement

- 3.13 The following section of this part of the report reviews the qualitative evidence about benefits that seem to be associated with PFI schools procurement. The evidence is derived from Audit Scotland's examination of six individual PFI schools projects. In each case the audit team interviewed the council project leaders and members to gain insights into the strengths and weaknesses of the process. Audit Scotland also interviewed representatives of some of the companies providing the PFI services and some head or senior teachers at a few of the project schools involved in each case.

PFI contracts promote high standards of project decision-making by all

- 3.14 For PFI schools the councils' experience is that, in contrast to their expectations regarding other procurement methods, there is a more direct and accountable relationship between them (as clients) and PFI providers. In their view this fosters high quality decision-making.
- 3.15 The contract documentation underpinning the relationship between the parties is voluminous and complex and the details vary from project to project. Nevertheless in general the commercial responsibilities and undertakings on each side are well known and clear.
- Each council's service requirements as client over the entire contract period are set down in output terms, in detail and in writing. There are objective measures of performance in relation to service delivery. The rights and responsibilities of all parties in relation to these requirements are also specified and there are contract incentives and sanctions to enforce these. The commercial consequences of, for example, changes by the client or under performance by the provider are spelt out and are enforceable.
 - The underlying principle in the payment mechanism in each case is payment for the achievement of agreed service outputs. In general this provides a very strong incentive for efficiency and economy, as well as providing a significant degree of cost certainty for the client. For the incentives to operate the council must specify the service adequately and must ensure effective monitoring of service delivery.
 - The other side of the coin is that council changes to service requirements mean changes to payment (client change can be a significant factor leading to cost overruns and delays for projects under other forms of procurement). Under PFI there is accordingly a strong incentive for councils as clients to avoid altering their requirements once the contract has been established. In two of the PFI schools projects Audit Scotland examined there was evidence that this feature discouraged client driven changes once the council had accepted the design of the schools, in the interests of delivering the original requirement without additional cost or delay (Exhibit 23).

Exhibit 23: PFI schools projects and change

Falkirk

During the construction period (which was completed in August 2000) consultation continued between the council, the PFI provider and users regarding design development. Some important changes or additional features have consequently been incorporated within the design of the schools as built. The council and the PFI provider negotiated and agreed the estimated capital costs of these changes, which the PFI provider will meet and recover from the council through commensurate increases in the level of service payments made under the PFI contract. The extra costs for the additional facilities are relatively small, less than 1% of the construction expenditure originally agreed within the PFI contract.

Glasgow

Overall completion of the construction works for 29 of the 30 project schools is due in August 2002, with schools being progressively made available to the council as they are completed in accordance with an agreed schedule. The council's construction monitoring team is monitoring implementation of the works, with generally satisfactory results to date.

Associated with the construction process there has been further consultation between the council, the PFI provider and users regarding design development. Consequently some changes or additional features have been incorporated within the new and refurbished schools as they are being built, with an estimated additional capital cost of £1-2 million (equivalent to less than 1% of the construction expenditure originally agreed within the PFI contract). The council and the PFI provider are negotiating agreement regarding the exact costs of these changes, which the PFI provider may in due course recover from the council through commensurate increases in the level of service payments made under the PFI contract.

Otherwise the council's PFI team has ruled out other detailed changes that individual schools have sought because significant change during the course of construction could be costly and counter productive of overall progress.

Source: Audit Scotland

- 3.16 Council staff responsible for implementing and monitoring PFI schools projects consider the arrangements provide a high level of accountability between client and service provider. The clear relationship between service outputs and cost – and trade offs between them – promotes a high standard of decision-making by all. Once the contract terms have been agreed the arrangements also tend to promote a collaborative approach to problem solving rather than an adversary relationship.
- 3.17 Some staff working in schools affected by PFI projects commented to Audit Scotland that, while the strength of the PFI contract arrangements were clear, users have experienced difficulty in contributing to the underlying statement of service requirements. Also, because significant client change towards the end of the PFI competition process can jeopardise the project and weaken the council's negotiating strength, councils have drawn back from this in particular cases, which may further limit the opportunity for users to influence requirements before schools construction work is complete. The lesson here is that getting the initial specification right is a key project driver, and this increases the importance that council project teams should attach to effective consultation with school users at the outset ie, well in advance of the main competition and subsequent construction phase.

Strategic review of the necessary school infrastructure

- 3.18 As shown in Part 1, an essential part of the PFI process is clear and fundamental thinking about the output needed from school buildings over the long term (and the associated project risks and choices). Again this tends to foster high quality decision-making.
- 3.19 While this is not a unique feature of PFI, councils have welcomed the greater flexibility to examine the balance between investment, whole life costs and performance standards – and to identify best value solutions – in partnership with major private sector enterprises and without the constraint of capital funding limits that affect other procurement routes. Because of the PFI contractual incentives there is also a greater emphasis on more rigorous planning in the long term.
- 3.20 Most councils believe that the PFI framework has stimulated or supported fresh thinking about service provision, although the impact of this is not necessarily large in every project. The most striking example of the impact of fresh thinking is the Glasgow PFI schools project. The project is part of the major strategic rationalisation of all secondary schools in the city, a key element of the council's drive to improve educational attainment. From the PFI schools project the council will obtain 11 new build secondary schools, more than it and most other potential providers had originally believed was possible. The council considers it may have been unable to achieve this outcome by any other procurement route within a reasonable timescale (Exhibit 24).

Exhibit 24: Glasgow Schools PFI project – a new approach to school renewal

Strategic context

In summary the PFI project involves refreshing and reorganising the accommodation of the rationalised Glasgow secondary school estate, to match better the changed needs of a smaller school population. Exhibit 6 above gives further information about this strategic context.

The council's PFI service requirements

In accordance with good practice the council prepared carefully and took care to express the service requirements for the PFI contract with no unreasonable constraints on design or innovation. During the PFI competition process the council set out in detail its required outputs and performance, analysing separately what it envisaged for new build, extended/rationalised and refurbished schools, life cycle maintenance strategies, facilities management and ICT. In this way the council aimed to foster the best possible proposals from bidders for upgrading, refurbishing and subsequently managing the project schools. Overall, the outcome of the PFI competition suggests that the council were effective in securing innovative and effective proposals from the winning bidder.

Response from bidders

After the start of the main competition phase in November 1998 the first phase culminated in the submission of proposals from the four consortia in March 1999. Separate evaluation panels covering technical, facilities management, education, ICT, financial and legal aspects tested all four bids. All four bids were assessed to be technically compliant (though only three were close to the council's affordability limit).

There were however significant differences in how each bidder proposed to address the council's main requirements. One bidder (the eventual winner) offered a variant bid to provide new build for 11 of the 29 project secondary schools, rather than mainly refurbishment and extension as the other bidders offered and the council had expected. The council had originally suggested only two new build secondary schools would be required. This comparatively radical proposal reinforced the need for careful and thorough evaluation and assessment by the council. The council concluded that the offer represented genuine innovation by the bidder who had responded well to the requirement to provide new and better ways of renovating and rationalising the schools to maximise overall value within the project.

In summary the PFI provider's project solution stood apart from those of other bidders. In accepting it the council has secured important benefits, which the evidence suggests could not have been obtained from any other provider:

- The council will acquire more newly built schools than it and most other potential providers had originally believed was possible.
- The scale of the project in particular the new build element means the council benefit from significant economies of scale in construction areas such as contingencies, design costs, mobilisation etc. The council's assessment shows the winning bidder's unit construction costs are competitive against construction industry cost benchmarks.
- The PFI provider responded very positively to the council's objective to make available spaces work harder. The PFI provider's solution involves minimising unused space, promoting wider and continuing economies in construction and operation including energy costs over the life of the contract.

Source: Audit Scotland

- 3.21 Another large and strategic renewal project where the PFI provider has brought fresh thinking is the Edinburgh PFI schools contract. The council's thinking at the outset was that it could afford only refurbishment and reconfiguration for the five secondary schools included as part of the project. The PFI provider, by exploring ways to best meet the output requirement, proposed a variant approach which the council has accepted to provide new build for two of these schools.

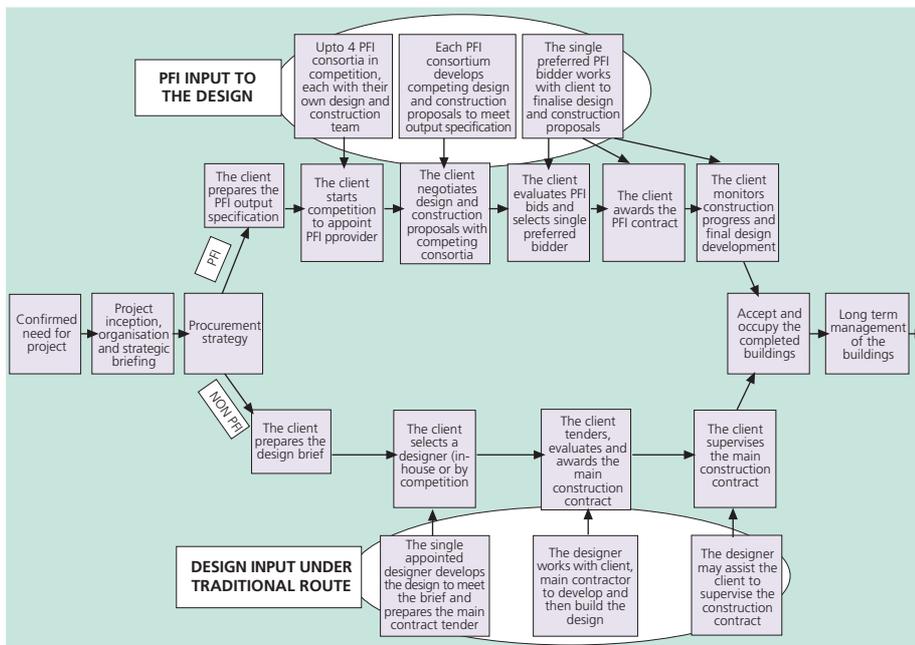
3.22 The other PFI schools projects are smaller scale or were conceived from the outset as new build not refurbishment. Consequently they do not give rise to the same opportunity for fresh thinking regarding the basic configuration of existing schools.

Innovation in aspects of how services are delivered, stimulated by competitive pressure

3.23 In most cases councils consider they have benefited from additional fresh thinking by prospective PFI providers in the more detailed proposals offered as part of the competition stage of each contract. In each case these proposals are subsequently crystallised in the contract as the PFI provider's accepted design and service solution. In some cases councils consider the winning bidder has offered superior technical solutions to those the council might otherwise have obtained.

3.24 In these cases the fresh thinking seems to be attributable to the requirement under the PFI to prepare much of the design in competition with other potential providers. Not only does the process of competition place a premium on good quality and fresh thinking by those participating, it also means that several different parties have the opportunity to offer solutions to meet the council's requirements. This is in contrast to a more traditional approach to building procurement where a single designer will be selected at an earlier stage who may not bring the same breadth of experience and imagination to the project as several potential providers operating in competition against each other (Exhibit 25)¹⁰.

Exhibit 25: Different approaches to design under PFI and other procurement routes



Source: Audit Scotland

¹⁰ In the interests of fair and proper competition councils must ensure they protect the commercial and intellectual property within individual bids. There are controls to ensure that there is no improper disclosure of commercially confidential proposals submitted by one bidder to others.

Better partnership working in some cases

- 3.25 A further potentially important (but difficult to quantify) benefit from PFI is the “innovation” in terms of better partnership working between public and private sector clients and providers. Adversarial relations between clients and the supply side leading to cost problems and delays are widely held to be associated with traditional building projects in both public and private sectors.
- 3.26 There is mixed evidence on this so far. Some PFI contracts have suffered tension between the parties where, despite the extensive contractual documentation, there has been uncertainty or dispute where responsibility for particular risks or costs has rested. But where such problems have arisen the council and the PFI provider have eventually reached agreement without significantly altering the project service or outcomes overall for the council.
- 3.27 In other cases councils see better relations with the private provider as an important benefit in its own right from PFI. There is no “contractual claims” mentality. In some cases where unforeseen problems have arisen during school construction it has been refreshing for council staff to observe how the contractor, because of the PFI incentives, takes the initiative to address and resolve the problem rapidly, cost effectively and without compromising service. This fosters a greater degree of trust between the parties, which may itself help to resolve other problems.

Better management of the risks associated with projects

- 3.28 The PFI schools contracts, in particular the payment mechanism, are at the heart of the relationship between the parties. Payment is critically dependent on a) satisfactory completion and delivery of the new/refurbished schools on time and with the necessary quality, and b) effective delivery of the managed facility service over the subsequent 25 or 30 years. This obliges all parties, but above all the PFI school provider, to review risks rigorously at all phases of the project, to ensure the service can be delivered within the guaranteed price.
- 3.29 The underlying principle is that risk should be allocated to the party best able to manage it, and there is no benefit in allocating any risk to the PFI provider if they are not well placed to control it¹¹. For example, as Part 1 discusses, there are risks in relation to how many pupils any PFI project school will require to accommodate in the long run. Education authorities can best manage many of the associated risks because their staff provide the core education service and if necessary they can implement demand management policies, for example in relation to pupil placement, which a PFI schools provider cannot.
- 3.30 Overall, however, the effect of PFI schools contracts generally is to transfer some or all of the responsibility for many risks to the PFI provider, which would otherwise remain the responsibility of the council (Exhibit 26). In principle this not only reduces the council’s exposure to risk but also ensures that the necessary costs involved in managing risk are minimised. Competition helps give councils assurance that the price they pay for the PFI provider accepting and managing a greater proportion of project risks than under traditional procurement is reasonable, though it does not guarantee that councils achieve the most cost-effective balance in this area.

¹¹ If the council were to do so the likelihood is that the PFI provider would price accordingly – there would be a significant ‘risk premium’. This is unlikely to provide best value compared to the cost of the council retaining and managing the risk itself.

Exhibit 26: Risk allocation in PFI schools projects – typical allocation between council and PFI provider

Risks specific to stage of contract	Risk allocation		
	Council	PFI provider	Shared
Planning stage/contract			
• Outline planning approval, statutory consultation/ public enquiry	√		
• Planning – full permission		√	
• Scottish Executive approval			√
• Land acquisitions – availability of land			√
Design stage			
• Alterations required by legislation/regulation			√
• Change to design by private partner		√	
• Change to design/misspecification by council	√		
• Misinterpretation of the design – designer		√	
• Delays caused by statutory authorities			√
• Delays caused by poor initial design		√	
Construction stage			
• Cost increase during design		√	
• Archaeological/ground condition/geotechnical problems		√	
• Utility connection (access to services)		√	
• CDM and all Health and Safety requirements		√	
• Default by contractor/sub contractor		√	
• Time overrun on construction		√	
• Increased time or cost due to changes in specification by council	√		
• Site safety including unexpected site conditions, staff and pupils		√	
• Reinstatement (rebuilding subsequent to damage or destruction)		√	
• Rise in material cost, procurement difficulties, third party claims, site security, bad weather		√	
Commissioning stage			
• Failure of systems (heating etc)		√	
• Fit for purpose		√	
• Insurance		√	
• Delayed completion and cost of rectification of problems		√	
Operational stage			
• Health and Safety issues		√	
• Changes in safety standards			√
• Life cycle maintenance costs unplanned/planned (building and equipment)		√	
• Cost overruns in service provision (including sub contracts)		√	
• Utilities: cost increase/ usage; failure – off site			√
• Utility failure – on site		√	
• Inclement weather/environmental		√	
• Achieving environmental standards		√	
• Default by PFI provider		√	
• Default by council	√		
• Emergency planning			√
• Failure in quality/achieving standards		√	
• Staff employment issues, wages, pensions, recruitment etc		√	
• Industrial action affecting service availability		√	
• Demand for services/volume usage	√		
• Change in service specification – contractor		√	
• Changes to requirements/ service specification – council	√		
• User generated damage – council staff during day	√		
• User generated damage – outwith school hours/contractor staff		√	
• Vandalism		√	
• Changes in quality standards			√
• Insurable risk in operation/service performance		√	
• Uninsurable risk in operation/service performance		√	
• Additional security requirement		√	

Note: Excludes general financial and regulatory risks such as changes in general law, inflation and interest rates.

Source: Audit Scotland

3.31 For every PFI schools contract there is a requirement for the council to make various risk assessments, analysis and quantification. This is both for the purposes of negotiation with the PFI bidders prior to contract and to assist the comparison of costs with a hypothetical publicly funded project. These assessments and estimates provide important evidence concerning the potential quantum of risk transfer, and are considered later in this part of the report.

Stronger financial control

- 3.32 A unique feature of the PFI is the rigorous examination of PFI project viability before any contract is signed. In most cases the principal security for the private funders' loans and investment in the project is the project cash flow; there is no physical collateral to secure the loans nor any guarantee how far the funders will get their investment back if the project encounters serious difficulties.
- 3.33 Linked to this the funders require very systematic, rigorous and thorough testing of the project business plans and the associated project risks.
- 3.34 This process and the analysis of risk is recognised by councils to be very much more thorough than any appraisal at the equivalent stage of a conventionally funded project. The underlying driver is the hard-edged commercial requirements of the funders to protect and assure their loans and investment before making any irreversible project commitment.
- 3.35 The downside of this process is that the scrutiny involved may lead to delay, changes in the risk allocation between the parties and the need to extend negotiation prior to the award of the PFI contract to allow the issues to be resolved. This process can increase the exposure of both parties to project risk. For example, the council will be exposed to interest rate risk for a longer period prior to contract (when the PFI provider becomes responsible); and the PFI provider may be under pressure to adhere to the previously agreed construction timetable, even though the delay in signing the contract has reduced the available construction period.

The benefits of PFI procurement are not consistently available to all schools projects or all unique to PFI

- 3.36 Overall Audit Scotland's examination identified many qualitative benefits from PFI procurement of schools, as described above. It is important to emphasise these benefits are variable and not necessarily unique to PFI.
- 3.37 Firstly, for any particular PFI schools project the opportunity to capture a given benefit will not necessarily be present to the same degree as in another project. For example, for a smaller scale project (involving one or just a few schools out of a typical council portfolio of between 50 and up to 200 primary and secondary schools) there will be less opportunity for innovation and additional fresh thinking concerning strategic reconfiguration of the schools estate.
- 3.38 Another dimension of variability is that some of the benefits of PFI are more strongly associated with particular phases of the project life cycle than others. For example improved risk management may be a key feature of the construction phase for any PFI schools project, but less important for subsequent schools operations and management.
- 3.39 Lastly, there are major benefits from PFI schools projects in areas such as improved risk allocation, effective project management and an enhanced focus on the quality of service. But while such benefits are strongly associated with PFI procurement they are not necessarily unique to it. It may be possible to achieve similar benefits from other procurement approaches. As noted in Part 1, the difficulty here is that while it is possible to conceive alternative procurement models which offer similar benefits to PFI, in reality capital expenditure constraints have meant there has been little or no opportunity for councils to test them in practice.

- 3.40 For future schools investment councils should be encouraged to match procurement options to project needs taking account of the particular benefits likely to be available from PFI as well as alternative options. If they choose to follow PFI procurement for schools they should identify at an early stage where PFI is most likely to provide added value and organise the PFI competitions so as to maximise the opportunity to capture the prospective benefits.
- 3.41 The matrix in Exhibit 27 illustrates where from experience to date benefits are likely to arise from PFI schools procurement, and what alternative options may be available in each case.

Exhibit 27: Where PFI schools procurement can bring benefits

Key	Procurement phase	Design of schools	Construction of schools (including transitional activities such as decant)	Maintenance of schools including life cycle maintenance	Operation of school facilities (cleaning, janitors, reception and in some cases catering)
<p>√ No simple or well proven way of replicating PFI benefit under alternative procurement routes</p> <p>? PFI benefit potentially available from alternative procurement routes</p> <p>x No evidence of significant benefits from PFI</p>	Feature	<p>√ Emphasis on long term building maintenance and facility management aspects. Although this could be emphasised under conventional procurement it would be difficult to achieve the same degree of risk transfer without transferring long-term responsibility for the schools property</p>	<p>? Strong focus on maintaining service during construction and delivery on time, though some aspects might be captured through a guaranteed maximum price contract or similar</p>	<p>√ Strong incentives to optimise whole life cost and service. The same impact is difficult to replicate without transferring long-term responsibility for the schools assets, which may add to costs.</p>	<p>x While the PFI contract provides a clear focus for service delivery school operations have already been subject to CCT initiatives, which can create similar incentives</p>
	Focus on quality of service				
	Project management	<p>√ Need for detailed analysis and specification of the outputs from the outset creates strong focus on project management</p>	<p>√ On large projects equal project management resource may not be readily available to a Council in the time frames required</p>	<p>Not applicable</p>	<p>Not applicable</p>
	Risk management	<p>? Design risk is with the providers. Could transfer the risk to the design and construction provider under conventional procurement by a design and build contract or similar.</p>	<p>? Construction risk is with the providers. Could transfer the risk to the design and construction provider through a guaranteed maximum price contract or similar.</p>	<p>√ Financial penalties for non-performance incentivise the operator to ensure maintenance is timely and effective. Difficult to replicate (even with a performance bond) without transferring long-term responsibility for the schools property</p>	<p>? Financial penalties for non-performance incentivise the operator to ensure operations are effective. Similar incentives eg performance bond could be provided through any service contract</p>
	Synergy, quality and added value through improved relationships	<p>? Constructive iteration between the client and the operator can promote good cost effective design. Similar benefit could be achieved through a guaranteed maximum price contract or similar</p>	<p>√ Where problems arise the long term output-oriented relationship encourages client and provider to work together to find the best mutually satisfactory outcome. Might be replicated through design, build and operate contracts but Councils have no experience of this approach</p>		<p>? Regular liaison on performance against standards. Should be replicated in any well-designed service contract with suitable incentives for service delivery.</p>
	Strong financial control and management	<p>? Finished design must work within a capped cost envelope, no scope for drift. In principle similar incentives could be achieved through a design competition though this could risk extending the process and designers might seek some compensation for the costs involved</p>	<p>? Cost certainty for the client, with construction risk transferred. In principle similar incentives could be achieved through a guaranteed maximum price contract or similar</p>	<p>√ Maintenance finance locked into the contract, no longer "soft target" for budget cuts. Difficult to establish similar control without transferring long-term responsibility for the schools property</p>	<p>? Payments by results with positive client sign off, as with any service-oriented contract.</p>
	Innovation	<p>? Additional fresh thinking about how best to meet output specification. Sharper commercial approach to identifying more cost-effective alternatives. Could capture similar effects through design competition or performance linked professional advice</p>	<p>x Established construction techniques being used, innovation has risk downsides.</p>	<p>? Life cycle and whole life costing are not innovative, though the incentives to apply the techniques are not present to the same extent in conventional public sector construction procurement.</p>	<p>x Little sign of innovation in this area. Help desk for facilities management well established concept, already a feature in some authorities pre-PFI</p>
	Effective exploitation of opportunities	<p>? The private sector's ability to exploit commercial opportunities (eg site reconfiguration to maximise sales receipts) is harnessed, but this is not unique to PFI.</p>	<p>Not applicable</p>	<p>Not applicable</p>	<p>? The private sector's ability to exploit commercial opportunities (eg, income generation from 3rd parties) is harnessed, but this is not unique to PFI.</p>

Source: Audit Scotland

There are disbenefits from PFI procurement of schools

- 3.42 There are, too, disbenefits to PFI procurement of schools. However, the disbenefits of PFI schools contracts should be seen in the context of the benefits they bring and it is necessary to make a balanced judgement in each particular case. Just as the potential advantages cannot be guaranteed, equally the disadvantages may not be fatal to the value of a given project.
- 3.43 As previously, this section of the report is derived from Audit Scotland's examination of individual PFI schools projects, supplemented by feedback from those involved in individual councils.

Managing the PFI schools procurement process is expensive for both public and private sectors

- 3.44 As noted in Part 2 the scale and intensity of each PFI schools project is substantial, even in projects involving only a single school. Each PFI schools project has taken between three and four years from inception through to commencement of the full service in new accommodation. There are significant costs associated solely with the process of establishing the contract and commencing the service.
- 3.45 In preparing for and managing the PFI schools competition and the contract award councils incur costs, both in committing staff time and in expenditure on consultant advisers. Similarly, costs arise for the private sector companies involved during the competition process (when several bidders participate in each case) and during the final contract negotiation stage (when only one bidder is involved).
- 3.46 For the projects Audit Scotland examined most councils did not maintain summary records of the total staff time commitment, though for two smaller PFI schools projects the total was costed at some £0.2 million for each project. However the main financial commitment involved is each council's need to appoint external advisers to assist the management of the project. Expenditure on external advisers ranged in total from between £0.3 million and £2.4 million for each project.
- 3.47 As well as their own direct costs it is important for councils to consider the private sector's set up costs in preparing for and negotiating each contract. In each case the winning bidder's expenses are typically incorporated in the financial plan for the schools project and subsequently recovered as part of the charge for the PFI service. It is fair that contractors should seek to recover their expenses in this way, but the evidence is that the level of expenses incurred on PFI schools projects is significant.
- In the six cases that Audit Scotland examined the winning bidder's set up costs ranged between £1 million and £9.2 million.
 - In each case these costs included the bidder's own bid development costs, external advisers' fees and one-off charges payable at the outset in connection with establishing the necessary project finance. A substantial part of the winning bidder's costs in each case was incurred at their risk, ie, before a contract was signed.
 - These figures exclude the bid development costs that the unsuccessful bidders have incurred in each case. Audit Scotland has no data to measure these costs. However the unsuccessful bidders' costs will be substantially lower than the winner's in each case because they do not

participate in the preferred bidder negotiation when the majority of bid costs are incurred.

- 3.48 Councils seek to control and manage all costs including their own direct expenditure on the PFI process and the bidders' costs. These costs may be expected to vary according to particular circumstances in each case. Nevertheless, combining the costs incurred by both the council and by the winning bidder in each case it does appear that set up and advisers' costs for PFI schools projects tend to be a proportionately greater burden (measured as a percentage of core construction costs) as the size of the project reduces (Exhibit 28).

Exhibit 28: Set up and advisory costs for six PFI schools projects

PFI school project	Set up and advisers costs, public and private sector combined	Construction costs	Set up etc as a % of construction costs
Glasgow	£12 million	£212 million	5%
Edinburgh	£6 million	£90 million	7%
Falkirk	£7 million	£71 million	11%
West Lothian	£2 million	£26 million	9%
Highland	£1 million	£17 million	8%
Balfron	£2 million	£15 million	15%
All six projects	£31 million	£440 million	7%

Source: Audit Scotland

The long-term PFI schools expenditure commitments may constrain councils' future spending decisions and reduce flexibility

- 3.49 The certainty of costs that PFI brings removes the ability of councils to flex elements of budgets one year with the next to deal with variations in their income levels.
- 3.50 In all cases councils have only contracted for part of their education estate to be covered by PFI. There is a risk that more intensive budgetary pressures will fall on the remaining part of the education budget or on other council services.
- 3.51 For six projects examined by Audit Scotland the net PFI payments (after deducting level playing field support grant) averaged 14% of the councils' total non-staff education budget. Exhibit 29 summarises the revenue consequences of these projects. In the largest contract (Glasgow) the PFI provider is responsible for providing and facilities management of all the council's 29 secondary schools (plus one new primary school) and in this case the net PFI charges represent 24% of Glasgow Council's entire non-staff education expenditure in 2000/01.

Exhibit 29: Revenue consequences of six PFI schools projects

	All 6 projects	Balforn	Edinburgh	Falkirk	Glasgow	Highland	West Lothian
PFI annual unitary charge	£74.8m	£2.0m	£12.1m	£11.9m	£41.5m	£2.9m	£4.4m
Less: Level playing field support	£34.3m	£1.6m	£5.9m	£8.6m	£14.7m	£1.6m	£1.9m
A Net annual PFI contract payment	£40.5m	£0.4m	£6.2m	£3.3m	£26.8m	£1.3m	£2.5m
Less: Existing running costs	£31.4m	£0.3m	£5.5m	£2.0m	£22.5m	-£0.4m	£1.5m
Funding gap	£9.1m	£0.1m	£0.7m	£1.3m	£4.3m	£1.7m	£1.1m
Year deal signed		2000	2001	1998	2000	2001	2001
Education expenditure in 2000-01 (for comparison)							
Total	£866m	£47m	£198m	£81m	£319m	£132m	£89m
B Non Staff	£285m	£13m	£63m	£30m	£113m	£39m	£27m
Staff	£577m	£34m	£130m	£51m	£206m	£93m	£62m
A as a proportion of B	14%	3%	10%	11%	24%	3%	9%

Source: Audit Scotland

The cost of private finance is higher than in the public sector

- 3.52 In any project requiring financial investment there is a financing cost. Where borrowing is the chosen source of funding the cost will be the fees, loan repayments and interest charges paid to the lender in exchange for advancing the necessary funds at the outset, ie the direct cash expense from servicing of the debt. In cases where there is no recourse to external funds and no direct financing costs – for example, in the case of investment funded from capital receipts from sale of property – there is still an opportunity cost for this capital. The money could have been used on another financially rewarding project and the cost of not taking this opportunity needs to be recognised.
- 3.53 In PFI schools projects the financing cost incurred by the PFI provider is part of the project costs and adds to the level of charge the council pays in return for the service. The main elements of the financing costs in these projects are the direct costs of obtaining and servicing loans and the dividends payable to the equity investors in the project. The borrowing is principally from banks and usually accounts for around 90% of funding. In most cases, the remaining 10% comes from equity partners in the form of shareholder loans (typically 9%) and direct equity ie shares in the company running the project (typically 1%).
- 3.54 The PFI financing costs depend on several factors and vary according to individual project circumstances and wider aspects. For example, interest rates charged on borrowing vary according to the security of the loan, the credit rating of the borrower, the risks associated with the project, the length of time for which the money is borrowed, the amount of competition between banks and borrowers and the prevailing market rates. The interest rates charged may also vary with the progress of the project, with usually a higher rate during the initial construction period than in the subsequent operating phase.
- 3.55 The interest rates charged by the banks and by the equity partners differ. The banks lend at a lower rate as they have a first call on the income to the

project, while the equity partners' lending is subordinate to this and carries an increased risk (and a correspondingly higher return). In addition, the equity partners look for a higher return on their lending to the project reflecting the potential return on alternative investment opportunities.

3.56 In addition to these borrowing costs there is the further cost associated with making dividend payments to the shareholders in the PFI project company. This is the highest risk capital in the project because the shareholders are entitled to dividends equal to whatever surplus money is left in the project company at the completion of the contract. If all goes to plan over the 25 or 30 years contract the shareholders will receive a substantial cash dividend. If things do not turn out as favourably as predicted the shareholders get a lower return, or in the worst case none at all.

3.57 For the six PFI schools projects examined by Audit Scotland the overall financing cost for the private sector has varied, but it has generally been in the range 7% to 10%, with the early Falkirk project having a higher rate at 12.9%. The range of rates contributing to the overall blended cost of capital for each PFI project is shown in Exhibit 30.

Exhibit 30: Overall cost of capital for PFI schools projects

Range of senior loan interest rates	Range of subordinated loan interest rates	Estimated returns on direct equity capital	Overall blended cost of capital for each PFI project
6 to 7% a year	10 to 16% a year	15 to 29% a year	7 to 13% a year

Note: Costs are expressed in nominal terms, reflecting actual costs. The rate of return on direct equity capital is highly dependent on project outturn over 25 or 30 years and may be higher or lower than indicated.

Source: Audit Scotland

3.58 The arrangements described above are typical of PFI schools projects. However the particular mix of financing may vary as experience in one case (Exhibit 31) illustrates.

Exhibit 31: Alternative PFI financing of the Balforn High School PFI project

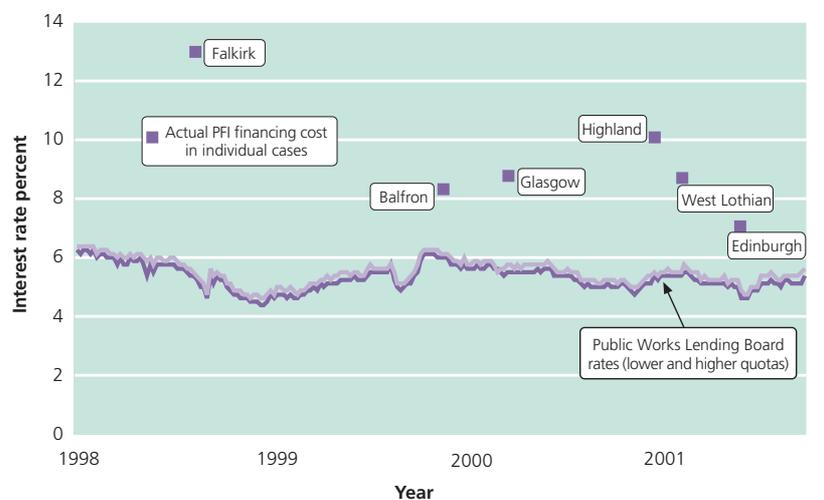
The PFI financing in the Balforn High School PFI contract was novel in that 99% of the necessary funding was from a bank and the only shareholders' capital was a one per cent equity investment. Although this produced a lower overall financing cost it was associated with a more adverse risk profile for the client, Stirling Council. In other projects banks have required higher shareholder investment because this helps to protect their own stake, which in turn may enable them to offer a lower interest rate.

In this case instead the council guaranteed a floor payment of about 60% of the annual charge due to the PFI provider, irrespective of the latter's actual contract performance, substantially reducing the risk to the bank. In return the parent company of the PFI provider guarantees its performance (and this guarantee is in turn supported by a form of insurance), so that if the PFI provider does not deliver the council may seek compensation from the parent (or its insurers). This helps to reduce the additional risk the council is exposed to, though in certain extreme situations (including contract termination for serious under performance) the council's position is less secure than in other contracts.

Source: Audit Scotland

- 3.59 For investment that is not financed through PFI, councils borrow money through the Public Works Lending Board (PWLB) or in the markets and they can almost invariably obtain more favourable rates than those available to the private sector providers in PFI deals. This is related to the long record of generally good credit worthiness in the UK public sector and because of the perceived greater security provided by access to tax revenues.
- 3.60 Exhibit 32 below compares PFI financing costs and council borrowing rates. The variation in interest rates charged by the PWLB between January 1998 and December 2001 can be seen together with the overall private sector cost of capital in each PFI deal.

Exhibit 32: PFI financing costs and council borrowing rates



Source: Audit Scotland

- 3.61 In summary, the PFI providers' overall financing cost passed on to councils is generally equivalent to between 7% and 10%, which is 2.5% to 4% more than a council would pay to borrow directly to finance equivalent expenditure. Audit Scotland calculates that, all other things being equal, this higher cost of capital adds costs of between £0.2 million and £0.3 million a year for each £10 million invested in a project. The additional cost of private sector finance may be equivalent to approximately 10% of the total estimated cost over the 25 or 30 years lives of the 12 first generation PFI school projects.
- 3.62 As paragraphs 3.80 to 3.89 below explain, the difference in financing costs has not been reflected in the costings which councils have prepared when comparing the forecast cost of each PFI schools deal with a hypothetical publicly funded alternative (the Public Sector Comparator).

For each PFI schools project the key value for money test is a fair comparison with a publicly funded alternative

- 3.63 Approval of PFI schools projects, as with any project, should depend on value for money. An earlier section of this part of the report (paragraphs 3.13 to 3.51) identified the qualitative elements relevant to decision-making. But there must also be a quantitative comparison of costs between any proposed PFI schools project and a publicly financed benchmark.

- 3.64 For each PFI schools project the responsible council has prepared a Public Sector Comparator (PSC) for this purpose. The PSC is an estimate of what it would cost to provide a similar level of output to the PFI contract using traditional (non-PFI) procurement. Exhibit 33 is a brief summary of the relevant principles for such appraisals, together with further more detailed guidance regarding the PSC that HM Treasury issued in 1999¹².

Exhibit 33: PFI schools – guidance on value for money appraisals and PSCs

HM Treasury – The Green Book – Appraisal And Evaluation In Central Government (1997)

The principles of the Green Book apply equally to local and central government, although it was originally written to help government departments and agencies appraise and evaluate their activities.

The Green Book provides guidance on the important areas of economic analysis that need to be covered in any appraisal. It indicates briefly some special features that apply to PFI projects particularly:

- The requirement for the public sector to specify its requirements in output terms, to encourage the best private sector response.
- The need for affordability assessments particularly concerning the long-term financial commitments from PFI projects.
- The need to achieve optimum risk allocation between the public and private sectors, to support the provision of cost effective and high quality services, and the corresponding requirement for risk analysis and costings.
- The need for a value for money appraisal at the outset of a PFI project (before inviting private sector bids) and a revised appraisal when bids have been made.
- The requirement in most PFI projects to use a comparison with a publicly funded alternative – the PSC – to supplement the comparison between competing PFI options leading ultimately to the selection of a PFI supplier to achieve value for money.
- In comparing options, a general requirement to use a discount rate of 6% in real terms as a broad measure of both the public sector cost of capital and the so called time preference rate, under which most people value £1 today more highly than the promise of £1 in a year's time.

Treasury Taskforce – Technical Note No 5 – How To Construct A Public Sector Comparator (1999)

The technical note provides detailed practical help (98 pages) on preparation of PSCs including full description and discussion of the purpose, scope and the detailed contents and development of the PSC. The note places particular emphasis on the identification, allocation and management of risks. It sets out:

- An overview of the role of the PSC and the important concepts governing its preparation.
- The contents of a typical PSC, what each part should contain and what other sources of information may be helpful.
- The detailed suggested methodology for the risk analysis to be included as part of the PSC.
- How the PSC fits into each of 14 defined stages of the wider PFI procurement process, from an early assessment of risks to inform the definition of the project at the outset through to using the results of the PSC risk analysis for continuing management of the contract following the completion of procurement.
- The three most important points relating to the construction and use of the PSC:
 - At the outset, an embryonic costing of the reference project, underpinning the outline business case and the authority for the project to proceed to detailed delivery.
 - A more fully worked up costing immediately before inviting the market to bid.
 - A revised and updated costing immediately prior to contract to underpin the value for money assessment.

- 3.65 For PFI schools projects the main elements of the PSC costing can be summarised as follows.

Construction costs

- 3.66 All the projects centre on the renewal of schools, involving variously the provision of new buildings, refurbishment, modification and reconfiguration of existing buildings or a mixture of both. The aim is to provide an improved and consistent standard of accommodation suitable for modern education over the PFI contract period or longer. Although a feature of PFI schools is that they involve investment levels that councils could not readily achieve by other means (Part 1), the approach followed is to prepare the PSC on the assumption that there is no such capital constraint. Consequently the scope and scale of renewal in the PSC for each schools project is always similar to that envisaged for the PFI contract, though there can be significant differences in areas such as how much new build each option provides to meet the specified level of service.

Operating costs

- 3.67 Teaching costs are excluded from the analysis, since in all cases responsibility for the core teaching work remains with the council. The relevant operating costs are those associated with the ownership, management and operation of the school premises. These costs include principally: energy costs and expenses such as rates, water and sewerage charges and insurance; day-to-day building repair and maintenance; cleaning services; caretaking work by janitors; catering (although in some schools catering has been excluded from the PFI contract and is correspondingly excluded from the PSC); and the management of these various activities.

Lifecycle maintenance expenditure

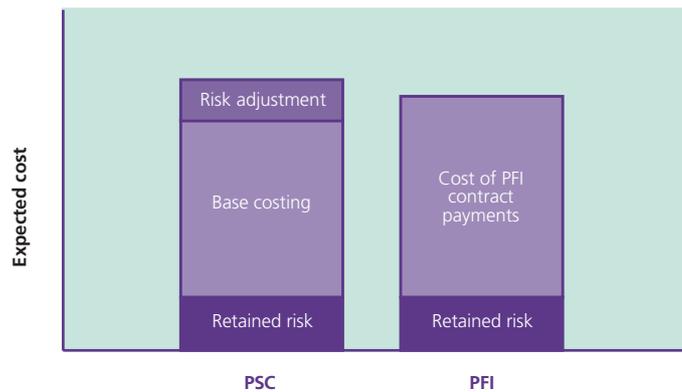
- 3.68 Because of the comparison with a PFI contract lasting 25 or 30 years, and the requirement to maintain a consistent standard and quality of accommodation, there is a need to allow in the PSC for the periodic replacement and renewal of elements of the school buildings. This may include aspects such as renewing internal decoration, repairing worn out floor coverings and replacing boilers and other plant and equipment as required. There may also be a need to allow over the years for major repairs of items such as roofs and guttering though hopefully not their complete replacement.
- 3.69 The dividing line between lifecycle and other elements of maintenance including in operating costs is not necessarily consistent between projects.

Risk allowances

- 3.70 There will always be risks that circumstances surrounding a project will vary and alter the project outcomes in an important way. For example there is a risk that any construction project will not be completed on time, to cost or to the necessary quality. Similarly, operating costs may grow more or less quickly than planned and aspects such as the caretaking or cleaning service may not meet the required standard. Because the PFI provider becomes financially responsible for certain risks that the council would otherwise retain there is a requirement for the PSC to assess and quantify the most likely consequences of such risks and to include the resulting risk adjustment in the PSC costing to allow a fair comparison of the options (Exhibit 34).

¹² In general the Scottish Executive's policy is that Treasury PFI guidance applies equally in Scotland as in England, taking account of the different legal system. The Executive may contribute to and will examine all new guidance but it takes the view that PFI is a UK market and there is little scope or need for a radically different approach.

Exhibit 34: Value for money comparisons



Source: 'How to construct a Public Sector Comparator', Treasury Taskforce, Technical Note No 5, 1999

Discounted cash flow calculations and net present costs

3.71 Value for money in public sector procurement may be defined as the optimum combination of whole life costs and quality to meet the customer's requirements¹³. Bearing in mind the need to consider whole life costs the comparison between any PFI school project and the PSC is made on the basis of a discounted cash flow analysis. This allows the council to compare projects with different cash flows over time on a common base, using the discount rate specified by Treasury for this purpose (currently 6% a year in real terms). Exhibit 35 illustrates the main principles involved in these calculations.

¹³ HM Treasury: Value for Money in Construction Procurement 1997

Exhibit 35: Discounted cash flows and net present costs

- The effect of using a discounting formula is simply to quantify the extent to which a sum of money received or paid in the future is worth less to the Government (or an individual) than the same amount today. It allows a cash flow that takes place over a period to be expressed as a single figure, which is equivalent to what it would cost now, rather than spread over a number of years.
- From an accounting and economic perspective the process of discounting is quite separate from adjustments to allow for inflation. Even in the absence of inflation normally people prefer to have cash sooner rather than later. Hence, there is a need for separate adjustments for inflation and for discounting.
- The technical background to the cost of capital and discounting in government is complex. However, for the purposes of central government appraisal and evaluation HM Treasury suggests the use of a 6% real public sector discount rate is required in most circumstances.
- The discount rate measures how rapidly the value to the public sector today of a future £ falls away through time. The 6% rate is a real discount rate ie excludes the effect of inflation. What that means is that £100 in 12 months time plus an adjustment for inflation is worth on average £94 today.
- To illustrate how the calculations work the table below shows a series of four payments of £1000 at 1-year intervals from now and the effect of discounting.

	Payments	Discount factor (discount rate 6%)	Discounted payments
1 year from now	£1,000	0.943	£943
2 years from now	£1,000	0.890	£890
3 years from now	£1,000	0.840	£840
4 year from now	£1,000	0.792	£792
Total payments	£4,000	Total present cost after discounting	£3,465

- The first payment is discounted by factor of 6% ie it is divided by 1.06. The receipt in year 2 receives two years of discounting – it is divided by 1.06 and again by 1.06. The process continues for the number of periods into the future that payments are made.
- The discounting produces the present cost of the payments. Where there is a stream of future receipts as well the same rule applies and their present value can be calculated. The payments and receipts are netted off to provide the Net Present Value (NPV) or Net Present Cost (NPC), according to whether benefits exceed costs or vice versa.

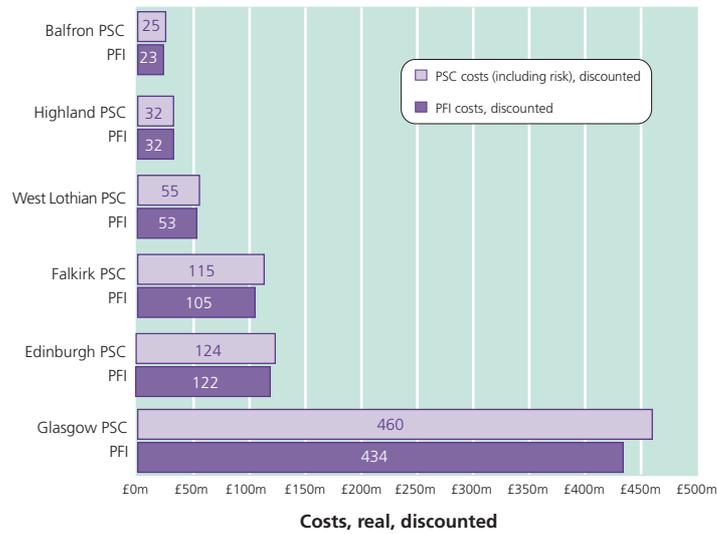
Source: HM Treasury

The PSC/PFI comparison on its own cannot provide decisive evidence of best value

For most schools projects the estimated financial margin in favour of the PFI is narrow

3.72 Overall, based on their PSC costings, each council concluded that in each case the PFI schools project offered a more economic option than conventional procurement, though in most cases the margin in favour of PFI was narrow. Exhibit 36 summarises the outcome of the council’s analysis in six PFI schools projects examined.

Exhibit 36: PFI versus PSC for six schools projects



Source: Audit Scotland, derived from PFI financial model, PSC in each case

The PSC costings have been completed with reasonable care and with allowance for risk

3.73 For six PFI schools projects Audit Scotland reviewed each council’s PSC analysis underpinning its decision to proceed with the PFI contract. Each council had followed the guidance on methodology available from the Treasury (Exhibit 33). In general terms Audit Scotland confirmed the analysis had been completed with reasonable care and objectivity. There was evidence of balanced judgements by the project teams in preparing the necessary estimates, and in particular cases there was a good evidence-based approach to estimating costs wherever possible.

3.74 An important feature of the analysis in every case was the risk adjustment to the base costings for the PSC. The analysis and identification of risks is a fundamental part of PFI procurement. In each case the council team used a formal risk workshop procedure, as is good practice, to help ensure a comprehensive, systematic and balanced assessment of risks. In most cases external consultant advisers participated in the workshops, bringing external knowledge and experience.

There is inherent uncertainty and subjectivity associated with the preparation of the PSC costings

3.75 The quantitative analysis represented by the preparation of a PSC is, and should remain, a useful aid to decision-making. It is obviously prudent for councils, when appraising PFI schools bids, to have a benchmark to help assess the financial and technical proposals that bidders have offered. However, despite the strengths of aspects of the analysis in individual cases, there is an inherent uncertainty and subjectivity in the process. Inevitably this has an impact on the results and is likely to constrain how much reliance can be placed on them.

- 3.76 In relation both to the base costings and the quantification of risk, judgements were needed in critical areas, including some areas where good evidence of risk outcomes was not available. Exhibit 37 provides examples drawn from findings in individual cases that illustrate the judgements and uncertainty involved in preparation of the PSC costings.

Exhibit 37: Examples of judgements and uncertainty in PSCs

In some cases there was a particularly strong evidence-based approach to estimating costs. But even in those cases the PSC estimates were subject to adjustment and in some cases changes reflected different subjective judgements rather than fresh evidence regarding costs. Consequently it was hard to say whether apparent differences in costs were real or simply the result of estimating uncertainty.

Risk adjustments

- In one case the single largest difference in the estimated costs of the PFI and the PSC was a £4 million risk adjustment to the PSC. The council's team had adopted a rigorous, systematic and generally well-documented approach to cost estimating and risk analysis. For example, the team had created a risk register with 111 individual entries including 39 quantified risk items. Consequently the evidence suggested risk was an important area of difference, and that potentially there was significant benefit in improved risk management from the PFI option.
- In the case noted above the main sources of the £4 million risk transfer benefit were design and construction risk and operating costs risk. Audit Scotland was satisfied that the £2 million design and construction adjustment was plausible and perhaps conservative. The estimate was equivalent to an 8% increase in forecast construction costs, which is not difficult to justify bearing in mind the history of cost overruns in the public sector generally. The £1.5 million operating risk adjustment, however, seemed potentially less plausible. After excluding energy and rates costs (for which the PFI provider takes no risk) the adjustment was equivalent to 9% of base costs. A large part of the adjustment is attributable to life cycle and reactive maintenance costs where it could be argued base estimates were already on the high side. It is arguable whether school operations are subject to risks of a similar magnitude to those expected under the main construction phase.
- In another case the single largest difference in the estimated costs of the PFI and the PSC was a £3 million risk adjustment to the PSC. Audit Scotland's review confirmed there was some important potential benefit here, though the quantum was uncertain.
- The £3 million estimate derived from analysis by the council's accounting advisers, for the purposes of considering the accounting treatment necessary for the project. This estimate and its underlying methodology were not consistent with the findings of an earlier analysis of project risks, nor was it documented to the same standard. In the council's final risk analysis the main sources of risk transfer benefit were design risk (estimated value £1.9 million) and operating costs (£1.1 million). The design risk adjustment was equivalent to an 11% increase in forecast construction costs which, if taken to include the risk of construction cost overrun, is plausible (though the council's track record in completing other new schools in recent years had not given rise to significant adverse construction cost variances). The operating risk adjustment was much less plausible. After excluding energy, rates and cleaning costs (for which the PFI provider takes little or no risk) the adjustment was equivalent to 20% of base operating and life cycle maintenance costs in the PSC. Without stronger evidence than available in this case it is not easy to accept that school operating costs are subject to risks of such a magnitude.

Exhibit 37 continued

Construction costs

- In one case there was an apparent saving of some £1 million in the estimated construction costs of the PFI contract compared to the final PSC estimate, prepared shortly before the PFI contract was approved (and before any adjustment for risk). At the earlier best and final offer stage, however, all three bidders' estimated construction costs had been higher than the PSC estimate by between £0.2 to £0.6 million. The PSC cost estimate was subsequently increased by about £1 million to reflect better changes in the scope of the project but there was no detailed explanation for the change. Audit Scotland concluded the apparent difference in costs was most likely to arise from the inherent margin of error in the underlying estimates and did not reflect any real difference in costs.
- In another case (Glasgow) the council's professional advisers prepared indicative construction cost estimates based on a notional construction solution designed to meet the council's output specification for the PFI project. Audit Scotland did not review the technical construction basis of this analysis but the forecast costs appeared in line with those for similar construction solutions offered by some of the competing PFI bidders. However the winning bidder had provided for the new build replacement of 11 schools while the PSC assumed mostly refurbishment with new build of only two secondary schools. Consequently the costs associated with the PFI deal and the PSC are not readily comparable because of the differences in approach to construction and whole life costing.

Operating costs

- In all cases the PSC was based in part on the council's existing running costs projected forward. However, in most cases there was little or no allowance made for any future efficiency gains in the operation of the refurbished schools. This could be a reasonable prospect bearing in mind the substantial capital investment assumed in the PSC, and the PSC may overstate future costs in this respect.
- In projecting forward existing running costs there may be an under statement in the PSC, to the extent that existing maintenance budgets are constrained and may under-provide for required lifecycle maintenance for the projected higher level of service. In most cases councils took professional advice in order to assemble a separate enhanced budget for lifecycle maintenance in the PSC, to allow a fairer comparison.
- In two cases the estimated lifecycle maintenance costs in the PSC were more than twice the level of equivalent costs under the PFI contract. Although a PFI contract may provide economies compared to traditional procurement, Audit Scotland saw no evidence in one case to explain this significant difference or to indicate why it may be reasonable. In the second case the PSC estimate for this item was based on published research data on maintenance expenditure (*), though it was still not possible to say why the provision was so much higher than the PFI provider considered reasonable. (*The Building Maintenance Information Service of the Royal Institution of Chartered Surveyors Special Report 299 March 2001 Review of Maintenance Costs 2001).
- In two cases there was a £1 million difference in the estimated rates cost of the PFI and PSC options. It was not clear in either case why technically there was a basis for assuming a different rates assessment for the two options since the building areas and investment levels were very similar in each option.

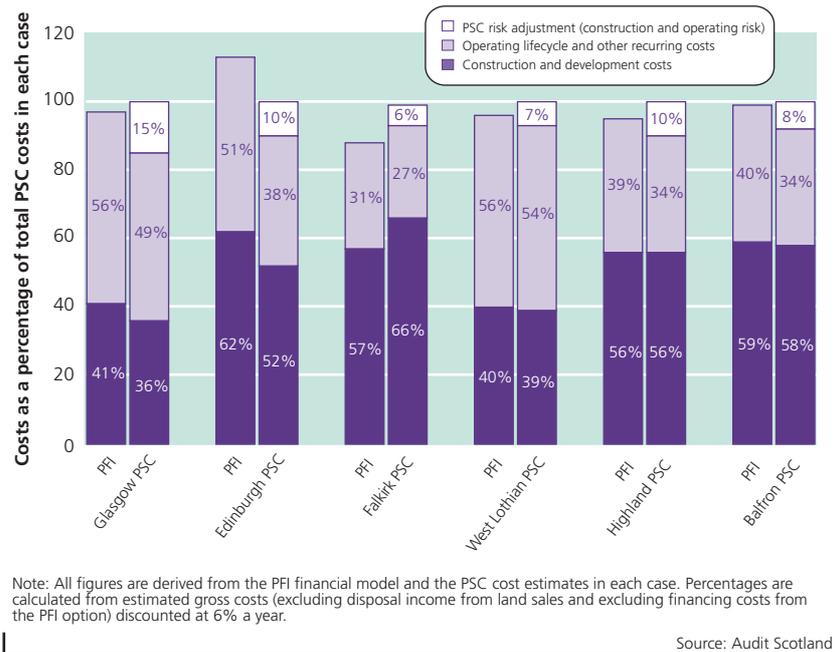
Source: HM Treasury

- 3.77 Inevitably the PSC is only a high level model of one notional solution to meet the output specification. While the effort applied to its development may be substantial there is likely to be significantly greater inherent uncertainty associated with aspects of the PSC estimates than the equivalent costings that underpin the winning PFI bidder's contract proposals in each case.
- In relation to construction costs, particularly, the PFI contractor will have prepared a specific design (developed to at least RIBA stage C¹⁴ throughout and with elements beyond this) that provides a detailed basis for costings (eg, a package cost plan). In each case the responsible design team is to be paid a substantial sum for completing the necessary work, and conceivably its fee may be at risk if the construction cost estimate proves inaccurate. There is therefore a thorough emphasis on managing risk in the cost plan, consistent with preparation for a guaranteed maximum price contract. In two cases examined the winning PFI bidder had tendered major elements of the construction work prior to the PFI contract signing, giving a substantial degree of price certainty.
 - None of this guarantees the final cost for the PFI provider. However it seems likely to provide a more reliable costing than the elemental costing of a notional solution with no actual design that must form the basis of the PSC estimate.
 - A further difficulty perhaps is the diminished knowledge base within some councils regarding school construction aspects. In principle the construction techniques assumed in estimating capital costs for the PSC should reflect recent actual practice in the public sector or the likely approach. In practice in most of the PFI schools cases examined the council had no recent experience of delivering schools investment on a significant scale. In individual cases bidders provided technical solutions that in important respects were different to those the council had originally envisaged. It was difficult to say in each case how far such proposals represented genuine innovation by the PFI bidder or whether the council's inexperience in major construction procurement of equivalent scale had prevented it from identifying the most effective solution from the outset.
- 3.78 Subjectivity too may influence judgements and decisions regarding the respective merits of the PFI and any alternative solution to providing new schools. Care is taken in the construction and analysis of the necessary costings within the PSC. But no funding for the PSC option is available under the terms of the competition for level playing field support from the Scottish Executive for PFI projects. Consequently if any PSC had suggested that the PFI was not economic it would have proved fatal to the project (no PFI schools project has so far failed this test). Consequently a very great deal hangs on professional and technical judgements underpinning the PSC costings, despite the fact that in many cases the judgements simply cannot be proved or disproved in either direction.
- 3.79 While there was usually extensive technical and professional work and input to the costings in each case there was also an emphasis on the bottom line and a perception of the PSC as a simple pass/fail test. The analysis for PFI school projects most often resulted in a set of costings, which indicated the

¹⁴ The Royal Institute of British Architects (RIBA) has defined a Plan of Work, in eight stages from A to H, describing the work in a construction project from inception to completion. Outline design is Stage C, where the general approach to layout, design and construction is prepared to obtain the authoritative agreement of the client.

PFI solution was more economic but without good analysis of why. In fact Audit Scotland's analysis is that, in most cases, the main elements of costs underlying the PFI option are higher than the equivalent forecast costs under the PSC. Thus in five cases out of six the PFI construction costs were higher than the PSC, and in all six cases the operating costs of the PFI option were higher than the PSC. In most cases the risk adjustment tipped the balance back in favour of the PFI option (Exhibit 38).

Exhibit 38: Main elements of cost for six schools projects



Does the PSC take into account the higher cost of private finance compared to council borrowing?

- 3.80 This report has demonstrated that council borrowing rates are typically between 2.5% and 4% below actual PFI financing costs in individual schools projects (Exhibit 32). It is natural, therefore, to ask how this difference in financing costs affects the relative costs of a publicly financed project compared to the PFI option (leaving aside the benefit of risk transfer and any underlying economy by the PFI provider). However, the PSC does not include this difference in financing costs, for reasons that are discussed below.
- 3.81 The PSC is one notional public sector solution to meet the output specification for the project. It is required by the Scottish Executive, on the advice and guidance of the Treasury, as a primary test of the value for money of the PFI deal. Bearing in mind the need to compare projects with different cash flows over time on a common base, it is necessary to compare costs using discounted cash flow methodology, and the Treasury specify the methodology and discount rate (6% a year in real terms) to be applied (Exhibit 33).
- 3.82 For the PFI option, the comparison of costs involves discounting the unitary charge proposed by the provider over the period of the contract. The unitary charge is itself derived from a financial model of the PFI provider's entire forecast cash flows including construction, operating costs, borrowings, repayments, interest charges, tax and profit margins.

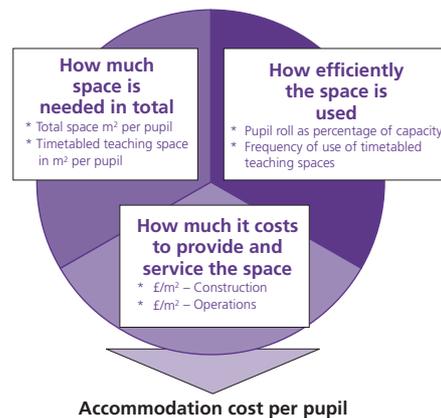
- 3.83 Calculation of the net present cost of the PSC is made on a somewhat different basis, as prescribed by the Treasury. Following the Treasury methodology, and like the PFI model, estimating the PSC cost involves forecasting the expected cash flows of the hypothetical publicly financed project including construction, operating costs etc (with a suitable adjustment for risk). But unlike the PFI model the calculations do not make any specific provision for financing cash flows (borrowings, repayments, interest charges etc) that a council would incur if it proceeded with the hypothetical project. Instead, arising from the requirement to discount the PSC cashflows at 6% a year in real terms, there is an imputed cost for capital employed in the project.
- 3.84 In technical terms, the use of an imputed cost of capital measure rather than actual financing costs is justified by reference to wider economic considerations, under which it can be argued that financing costs do not have any role in public sector investment appraisal. The level of public spending as a whole is a macroeconomic decision by the Government, taking into account judgements of the level of borrowing and taxation appropriate to economic conditions and the level of public capital investment. Within this quantum (in Scotland, within the Scottish assigned budget), choices have to be made between projects. It is this “opportunity cost of capital” that is relevant, not the actual financing costs, for the purposes of investment appraisal.
- 3.85 The choice of the 6% real discount rate reflects these policy considerations. It is based upon the upper end of a range of assessments of the long-term historic cost of public sector capital. In part it is a policy judgement and testing the evidence to support the chosen rate has not formed part of this study. The real rate of 6% a year is equivalent to 8.65% a year in nominal terms, based on the Government’s current target rate for inflation. The consequence is that the cost of capital included in the PSC costing is currently some 2.5% to 3% higher than a council would actually pay if they borrowed to finance such a project.
- 3.86 Another perspective that can be taken, however, is that the comparison of costs between the PSC and the PFI option is not an investment appraisal (ie, a decision whether or not to proceed with a given capital project). Nor is it based on a full cost benefit analysis. By the time the definitive PSC estimate is prepared for a PFI schools project (just before the PFI contract is signed) a decision in principle in favour of the project has already been established on other (qualitative) grounds. The purpose of the PSC is to provide a cost comparison between two alternative methods of procuring the same outcome (the level of output that is defined for the proposed PFI contract) in recognition that, while the alternative investment models (PFI and PSC) may not be markedly different, the associated costs may be. The aim of the PSC, therefore, is to provide some assurance about which offers greatest economy.
- 3.87 The contrasting views set out above cannot easily be reconciled. In principle, it is right and necessary for public bodies to allow for differences in cash flow associated with alternative procurement options, and discounted cash flow analysis is a useful tool to achieve this. However there is a question about whether the opportunity cost of capital or the financing cost is most relevant for the analysis, and this can and does affect the calculation in different ways.

- 3.88 For the projects included in this study, the PSC was calculated in accordance with the methodology prescribed by the Treasury. This is now the subject of a review and Audit Scotland understands that this will include consideration of the appropriate discount rate.
- 3.89 Audit Scotland considers that, for local authorities, the actual costs of debt financing are a relevant if not necessarily decisive factor in testing the economy and ultimately the value for money of a PFI schools contract¹⁵.

Councils and the Executive should improve the usefulness of the PSC as a value for money benchmark

- 3.90 Exhibit 39 illustrates different dimensions of cost effectiveness in providing school accommodation, and how these influence the overall accommodation cost per pupil. Councils should consider these various factors for the purposes of future cost comparisons and appraisals.

Exhibit 39: Cost effectiveness in providing school accommodation



Source: Audit Scotland

¹⁵ It is important to note that for PFI schools contracts the Scottish Executive compensate councils with level playing field support, to allow for the PFI provider's borrowing costs reflected in its contract charges in each case. The support paid to each council is calculated by applying a notional broadly commercial rate of interest (currently 8.1%) to 80% of the eligible capital expenditure by the PFI provider. Consequently councils may not bear directly all of the additional financing cost that arises from the use of PFI in these projects.

3.91 Exhibit 40 illustrates that based on analysis of six PFI schools projects there is significant variation in the costs achieved between schemes.

Exhibit 40: Costs in six PFI schools projects

Measures of cost effectiveness	Actual data for six projects					
	New build and refurbishment projects			New build projects		
	West Lothian	Edinburgh*	Glasgow	Balfron	Falkirk	Highland**
Accommodation cost per pupil place Annual PFI contract cost per pupil space	£1,100	£1,300	£1,000***	£2,200	£1,800	£3,700
How much space is provided in total Total area per pupil place:	10 m ²	10 m ²	10 m ²	14 m ²	9 m ²	22 m ²
Primary	7 m ²	7 m ²	7 m ²	–	–	10 m ²
Secondary	10 m ²	10 m ²	10 m ²	14 m ²	9 m ²	25 m ²
Total schools area	43,400 m ²	91,129 m ²	321,200 m ²	13,500 m ²	63,300 m ²	14,300 m ²
How efficiently the space is used Current pupil roll as % of total places	81%	78%****	88%	95%	72%	75%
How much it cost to provide and service the space Construction cost per m ² (new build)	£1,100/m ²	£1,200/m ²	£1,000/m ²	£1,100/m ²	£1,300/m ²	£1,200/m ²
Construction cost per m ² (refurbishment)	£600/m ²	£800/m ²	£500/m ²	–	–	–
Annual recurring cost per m ²	£53/m ²	£66/m ²	£61/m ²	£82/m ²	£84/m ²	£109/m ²

- * The Edinburgh project provides a diverse range of accommodation provision, including secondary, primary, special schools and a highly specialised close support unit.
- ** The primary and secondary schools in the Highland project will serve dispersed rural communities and provide additional community facilities. The council expect this to be recognised in future ERDF funding, which will reduce the effective unitary charge. The delivery of Gaelic medium teaching in small groups also has an impact and the schools cannot achieve the economies of scale and space efficiencies obtained elsewhere.
- *** The Glasgow project includes the provision of ICT (Information and Computing Technology) in contrast to the other projects. This is estimated to account for £100 per pupil place per year.
- **** This figure reflects pupil rolls based on current catchment areas for under-occupied primary schools being replaced by the PFI project. The catchments will be adjusted when project schools are available.

Source: Audit Scotland

3.92 It is not surprising to find variation in unit cost per pupil place across the six projects (Exhibit 40), given the varied circumstances of each project. Some projects are entirely new build, while others are mainly refurbishment of existing property or a mixture of new build and refurbishment. The mix between primary, secondary and special facilities also varies between projects. Similarly, the ongoing costs of servicing the renewed schools (annual recurring cost per m²) shows variation for the same reasons. Hard and fast conclusions about cost effectiveness cannot therefore be drawn on comparison of unit costs alone at the project level.

3.93 Nevertheless, variations in the other measures highlight questions that councils will need to consider in future projects. For example:

- within the five school projects in central Scotland secondary school pupil space provision varies by some 50% (total area per pupil place is between 9m² and 14m²).
- school utilisation rates (current pupil roll as a percentage of total places at maximum capacity) vary from 72% to 95%.
- construction costs per m² for new build schools vary by some 30%, between £1,000 and £1,300 per m².

3.94 The figures themselves will not tell the whole story. For example, a comparison of the construction costs per m² for new build schools costs suggests that there may be economies of scale arising from the large scale of the PFI project in Glasgow. But a more systematic comparison of the schools as designed and built is also necessary to determine the real relative value for money.

3.95 In the light of these findings, the information underpinning PSC assumptions needs to be developed and made more transparent. Councils are now well placed to share experience and knowledge of costs gained from the PFI process. At the same time there is scope for developing cost benchmarks to guide the development and assessment of future PFI schools projects. Building on the measures indicated above councils should improve the analysis of cost effectiveness for future cost comparisons and appraisals and share information such as unit construction and operating costs actually experienced in individual projects. This should help understand why there are significant variations between projects in cost per pupil, and promote value for money.

Annex A: Study approach and methods

Study aim and rationale

1. PFI deals are an important component of public sector procurement. Public sector auditors in the UK welcome and support well thought through innovation and beneficial change. The auditors' role is to provide independent scrutiny and assurance in a way that facilitates innovation and does not prevent beneficial change¹⁶.
2. The aims and rationale for this study of PFI and schools were as follows.
 - The study aimed to help inform the debate on this still high profile initiative and whether the PFI deals in Scotland represent value for money. It focussed on schools as the single most important area, and sought to provide evidence based analysis and independent assessment. It is the first time any audit body in the UK has examined the impact of the PFI in a thematic service-oriented way across a particular sector, and it is the first substantive audit review of the PFI in the UK local authority sector.
 - The study aimed to provide lessons for future procurement and service provision decisions, which could help improve value for money.
 - The study was not intended to challenge government policy as to whether PFI itself is best value. Rather the study was aimed at being instructive on how to obtain value for money from PFI projects.

Study approach

3. Essentially, the audit approach was to evaluate systematically and fairly the implementation and (so far as there is yet evidence available) the outcomes of a sample of six of the current PFI schools projects. Audit Scotland selected a mix of larger and smaller projects of different types (new build and refurbishment), including two projects where construction is complete and one project from outside central Scotland, to reflect the diversity present within all of the projects. The six projects examined in depth represent 86% of the total capital value of the nine PFI schools deals signed to date.
4. The audit examination adopted generic good practice criteria, though each project was considered on its merits and on the basis of the specific evidence available. In particular, in examining projects, Audit Scotland drew on published guidance on good practice in PFI procurement and project management (particularly guidance issued by HM Treasury) and on good audit practice on auditing PFI contracts:

¹⁶ 'Public Audit Forum – The Implications for Audit of the Modernising Government Agenda', April 1999.

Examining the value for money of PFI deals

The analytical framework is based on four pillars, which provide the foundation of a successful PFI deal. Within the framework a range of detailed subsidiary issues are identified. In summary the four pillars of a good PFI deal are:

- **Set clear objectives:** Top management of the public sector client need to think through from the start exactly what they are looking for from the deal and how it can be expected to deliver the outcome.
- **Apply the proper procurement processes:** The project managers must design a process that maximises the prospect of value for money whilst complying with relevant law and regulations. Good competition is vital.
- **Select the best available deal:** The aim must be to seek out the best available deal and to maintain that position during negotiations.
- **Ensure the deal makes sense:** Throughout the procurement, top management need to be satisfied that the proposed deal provides the best way of meeting their objectives for the project.

Details of the framework are set out in a report (Examining the value for money of deals under the Private Finance Initiative), which can be obtained from the National Audit Office at <http://www.nao.gov.uk/>

5. The examination was based upon a review of project records and relevant documents held by the councils involved. There were interviews with those involved in the project, including:
 - council PFI project teams
 - representatives of some of the PFI providers
 - senior teachers and teachers at selected project schools.
6. The study investigation took place between September 2001 and May 2002. After examining individual projects the study team provided detailed written feedback and subsequently discussed key points with each council individually. The main aim of the study was not to conclude on the performance of individual councils, but of necessity the study report refers to evidence from individual PFI projects examined. Individual audit conclusions in each of the cases examined are summarised in Annex B to this report.
7. The Audit Scotland study team comprised Arwel Roberts (Director), Dick Gill (Senior Manager) and Jim Martin (Manager). The team has audit experience in the PFI area and in the wider construction procurement area.

Study advisory panel and PFI expert group

8. To draw on external knowledge and experience and provide an extra perspective Audit Scotland established two groups to assist the study, a PFI expert group and a study advisory panel. At key stages these groups considered and critically evaluated the study approach and methodology, suggested issues to consider and useful contacts and provided a critical sounding board on the emerging findings and the final study report.

Study advisory panel

Ms Riona Bell	Deputy Head, Scottish Executive PFI Unit
Dr Alister Coutts	Director of Property and Architectural Services, The Highland Council
Mrs Judith Gillespie	Development Manager, Scottish Parent Teacher Council
Dr Roddy Macdonald	Head of Schools Standards and Improvement Division, Scottish Executive
Mr Ian Robertson	Head of Planning and Resources, Children's Services, Stirling Council
Mr George Smuga	Rector, The Royal High School, Edinburgh

PFI expert group

Mr Jeremy Colman	Assistant Auditor General, National Audit Office
Mr David Gray	Chairman DTZ Peda Consulting
Professor David Heald	Professor of Accountancy and Director of the Centre for Regional Public Finance, University of Aberdeen
Mr Peter Robinson	Senior Economist, Institute for Public Policy Research

9. The Accounts Commission and Audit Scotland would like to thank everybody – within these groups, within councils' PFI project teams and elsewhere – who assisted and contributed to the study.

Annex B: PFI schools case studies

- The following pages of the report summarise Audit Scotland's detailed findings from its examination of six individual PFI schools projects:

Project	Contract date	Capital value	Summary of project
Edinburgh	November 2001	£90 million	Ten primary schools (new build), five secondary schools (two new build and three refurbished and extended), three special schools (two new and one refurbished and extended), a new secure unit and a new community centre (9,000 places).
Highland	June 2001	£17 million	Accommodation services including community facilities and nurseries for two new small secondary schools (250 secondary places each) and two new small primary schools (150 primary places).
West Lothian	August 2001	£28 million	Three extended/ refurbished secondary schools, two extended/ refurbished primary schools and one new primary school (4,600 places).
Glasgow Project 2002	March 2000	£225 million	29 secondary schools – 11 new build, 8 extend/refurbish and 10 refurbished – and one new primary school (33,000 places). Includes information and technology services for 12 years.
Balfour High School, Stirling	April 2000	£17 million	One new secondary school (970 places) with local community access for leisure, recreation and learning.
Falkirk	August 1998	£71 million	"Pathfinder" scheme. Four new build secondary schools and one special school (6,300 pupil places in total).

Edinburgh Schools Project

Accommodation services for a portfolio of ten primary, five secondary and three special schools and one close support unit for the City of Edinburgh Council.

Forecast contract cost:	£479 million (cash, undiscounted over 30 years) £119 million (real, discounted at 6%, 1st April 2000 base)
Contract payment for 1st full year:	£12.1 million, (£6.2 million net after level playing field support)
Full service period:	30 years
Signed:	31 August 2001
Financial Close:	15 November 2001
Full service commences:	8 August 2003
End of contract:	September 2033

1. **The main driver behind this project was the need to reconfigure at a strategic level the schools estate.** Many schools required refurbishment to meet modern needs and there was a need for rationalisation to release resources and address excess capacity. The PFI option allowed the council to address these issues in a shorter timescale than would have been possible under existing capital consents.
2. **The council adopted a rational and methodical approach to the selection of schools for inclusion in the project.** Not all the council's 138 schools were included in the project but there was a multi-criteria assessment of the condition of whole of the non-specialist schools estate to determine which should be selected. This addressed aspects such as problems of over-capacity and opportunities for economies in running costs as well as educational factors.
3. **Through the PFI deal, the council is addressing significant problem of over-capacity in primary school provision.** Future demand for the individual schools is difficult to predict and is complicated by recent forecasts from the General Register Office for Scotland (November 2001) indicating greater reductions in the Scottish child population than previously forecast (1998). To ensure that as far as possible the existing over capacity problem is eliminated the council will need to monitor future trends and manage and adjust catchment area boundaries to ensure that all the schools achieve the minimum occupancy target of 80%.
4. **In accordance with good practice, the council provided bidders with a detailed and well-researched output based specification that left room for innovation by bidders.** The council was also careful to communicate to bidders its own generic briefs for primary and secondary schools developed in the early 1990s. The bidders' proposals have largely met the council's generic brief in relation to space standards.
5. In the absence of central guidance in Scotland on school environments the council set specifications that draw on the extensive guidance produced by the Department for Education and Employment (DfEE) in England and professional guidance produced by the Chartered Institute of Building Systems Engineers. This guidance provides for what is considered good environments in schools but does not necessarily reflect the latest thinking on best practice on educational environments internationally.
6. **The council actively sought to limit advisers' costs through a single fixed price contract with a lead consultant assembling a consortium of professions.** While not as successful as hoped the results were favourable, given the size and complexity of the deal. The initial budget proved

ambitious but the outturn is not unusually high compared to the level of fees experienced in other major PFI schools projects.

7. **The council set and met its targets for the overall cost of the PFI deal.** The targets were £122 million (net present cost, after adjustment for transitional period costs) and £12 million for the first full year payment. There was no significant increase in net contract costs despite eight months exclusive negotiation with a single preferred bidder.
8. **The council was careful to involve users through the involvement of head teachers and the chairs of school boards in a structured assessment process for the competing bids.** There was also extensive consultation with parents and stakeholders in parallel with finalisation of the contract proposals. There was general acceptance of the reconfiguration of the estate, despite the sensitivity of changes in catchment areas and the closure or amalgamation of several schools.
9. **Although the PFI contract provides a high quality solution and is affordable, the PSC does not provide decisive evidence that it is the most economic solution.** The council's assessment showed that the PFI contract would cost less than the estimated PSC but there is inherent uncertainty in the hypothetical costings included in any PSC and in some areas in this case (rates and catering) a lower level of costs could be considered. Also the costs of the PSC and the PFI contract are not wholly comparable because of differences in the number of new build and refurbished schools for each. Another complication affecting the comparison is that the notional PSC solution assumed significantly lower income from disposal of surplus land and the underlying costs of the PFI contract were higher:

	PFI contract*	Risk adjusted PSC*
Gross costs	£147m (with two new secondary schools)	£138m (no new secondary schools)
<i>Less: Income from land sales</i>	(£25m)	(£13m)
Net costs	£122m (including £2m transitional costs)	£124m

* Note: All figures are net present cost.

10. The council concluded that the PFI contract provided a better value solution than the hypothetical PSC alternative because of the enhanced new build element, and the proposal was affordable despite higher underlying costs because of the higher volume of land sales. Although the PSC does not provide decisive evidence of the cost effectiveness of the PFI contract there is assurance that costs are broadly reasonable. This assurance is because the winner of the PFI contract competition offered lower overall costs than similar proposals from the second bidder, which also included a higher proportion of new build than the PSC.

Highland Schools Project

Accommodation services including community facilities and nurseries for two new primary and two new secondary schools

Forecast contract cost:	£85 million (cash, undiscounted over 26.5 years) £32 million (real, discounted at 6% a year, April 2001 base)
Contract payment for 1st full year:	£2.9 million (£1.3 million net after level playing field support)
Full service period:	25 years
Signed:	June 2001
Full service commences:	August 2002
End of contract:	2027

- A main driver behind the PFI project was the opportunity to advance investment in new school accommodation.** The case for investment in the four new build schools was to replace poor quality buildings in three locations and to provide a new school in the remote Ardnamurchan peninsula. There were serious concerns regarding the age and dilapidation of the current buildings and the extensive use of huts. The new school at Ardnamurchan would complete the development of a west coast chain of schools and reduce the reliance on hostel-based education for pupils from that area. Compared to the council's responsibility for 218 schools it is a comparatively small project and it is not clear how far it was prepared taking account of the council's wider investment needs. The council has undertaken a wider and more systematic assessment of overall school investment priorities to help scope the next PFI project.
- There is a question about whether the package of schools comprising the deal was well chosen to drive out a good value for money solution from PFI.** The four schools are small, remote and dispersed from each other, limiting the opportunity for economies of scale in areas such as construction and subsequent service provision. Projects were chosen from the 5-year Capital Programme as being those that should be accorded priority status due either to their strategic importance or the condition of the existing facility. There was restricted scope for design innovation – reflecting location and environmental sensitivity, the council expected the bidders to apply traditional build methods, and the basic organisation of each school was closely specified. It was a small package, with a potentially high ratio of set up to development costs. Against these factors it is important to recognise that this was the council's first PFI procurement and it was consequently seeking a low risk project.
- For one of the secondary schools in the PFI project the pupil roll may not grow to match the target capacity over the 25 years PFI service period.** All of the project schools have social and economic importance as drivers helping to sustain local communities in the sparsely populated areas in which they are located. This and other factors help to explain what may otherwise be considered surplus capacity at one school. For the other three PFI schools there is a reasonable balance between capacity and expected future demand. In the context of the council's current PPP2 schools development, which could include many more schools, more detailed school-by-school demand forecasts are being considered, to take account of the long-term underlying downward trend in the Scottish child population.
- The council recognised the importance of affordability as a key constraint from the outset and set and achieved targets for this aspect of the deal.** The position reached in the final PFI contract satisfied the council's specified

affordability target and will result in a forecast £1.7 million a year net additional revenue cost.

5. **In accordance with good practice the council assembled a strong and appropriate project management structure.** The council did not achieve an initial very tight timetable to enter into a PFI contract within 18 months from start to finish. It did largely achieve a revised and more realistic procurement timetable set in early 2000.
6. **There is a question mark about the strength of underlying market interest in the Highland schools PFI deal.** After advertising and expressions of interest from 22 developers or potential developers five consortia applied for pre-qualification for tendering. In other PFI schools projects there can be up to 90 expressions of interest and between eight and fourteen consortia have applied for pre-qualification. The council selected three consortia to proceed to the main competitive negotiation stage in February 2000. These three had PFI and substantial construction experience, while the two unsuccessful consortia were assessed to be insufficiently qualified in terms of capability and PFI experience. None of three resulting proposals in June 2000 fully satisfied the council's requirements, and in the subsequent best and final offer round only one proposal satisfied the affordability target (though all three offers were otherwise sufficiently compliant).
7. **There was adequate competitive tension and the council ensured there was no significant increase in net contract costs during eight months of exclusive negotiation with the preferred bidder.** While there is a question about the strength of underlying market interest there is no doubt about the competition achieved between the three bidders that participated. Following the appointment of the preferred bidder in October 2000 there was extensive negotiation on diverse technical, legal, commercial and financial aspects before the contract was completed in June 2001. During this period there was only a comparatively small increase (3%) in the net PFI contract cost, mainly reflecting additional council requirements.
8. **The result of the public sector comparator (PSC) test does not indicate compelling evidence that the PFI deal offers superior value for money compared to conventional procurement.** The council's analysis is that the net present cost of the PFI deal was just 3% lower than the estimated cost of the PSC. While in general the project team prepared the PSC estimates carefully and objectively there are areas where it is not possible to be confident that the apparent economies in favour of the PFI project are real rather than a matter of the inevitable estimating uncertainty associated with financial projections over 27 years. There is also a question whether during the PFI competition the council should have disclosed full details of the PSC to all three bidders. Although this was done in the interests of encouraging bids that were consistent with the council's affordability targets, the disclosure may undermine the integrity of the PSC as a value for money benchmark.
9. **Progress of the contract works so far is a little behind the planned timetable.** The council's project team remains responsible for leading supervision and monitoring of the different aspects of performance, to confirm satisfactory delivery of the contract obligations. For the current construction phase monitoring shows that progress of the four project schools was between two and seven weeks behind schedule (in November 2001). It is not possible to say yet whether this delay will affect the required service commencement date for the schools, 12 August 2002. The contractor's response so far to this problem confirms better risk management is an important potential benefit of PFI to the council as client.

West Lothian Schools Project

Accommodation services for three refurbished and extended secondary schools and one new build and two extended and refurbished primary schools

Forecast contract cost:	£178 million (cash, undiscounted over 31.5 years) £53 million (real, discounted at 6% a year, April 2000 base)
Contract payment for 1st full year:	£4.4 million (£2.5 million net after level playing field support)
Full service period:	30 years
Signed:	August 2001
Full service commences:	November 2002
End of contract:	2033

- A main driver behind the PFI project was the opportunity to obtain investment in new and refurbished school accommodation.** The council pursued the PFI as an additional opportunity to obtain worthwhile service improvements, which could not otherwise be funded. This is a comparatively large project in the context of the council's recent investment programme, though it deals with only part of the council's overall investment needs associated with its school properties. The council has subsequently developed its thinking on PFI and strategic estate management issues, obtaining accommodation and condition survey information for all school properties and undertaking a systematic assessment of priorities to help scope the next PFI project.
- In accordance with good practice the council prepared for the PFI contract carefully and took care to express the service requirements with no unreasonable constraints on design or innovation.** The outcome of the PFI competition suggests that the council secured effective, high quality proposals from the winning bidder. An important benefit to the council from PFI procurement is the transfer to the service provider of responsibility for significant risk items, such as the delivery of the construction works within a relatively short timescale. There is some evidence of innovation by the service provider regarding aspects of the design of the construction and improvement works.
- For the secondary schools in the PFI project pupil rolls are expected to grow to match the target capacity over the 30 years PFI contract.** The Council's requirement concerned three primary and three secondary schools. For each of the refurbished secondaries, although existing pupil rolls are below 1,000, the council required an increased capacity of 1,200 pupils. While the forecast growth runs counter to national forecasts, there is significant local development pressure in the area and reasonable evidence to conclude pupil demand will grow. For refurbishing existing schools (rather than building new) the cost impact of any forecasting "optimism" is likely to be low.
- The council recognised the importance of affordability as a key constraint from the outset and set and achieved targets for this aspect of the deal.** The position reached in the final PFI contract largely satisfied the council's affordability targets, resulting in a forecast £1.1 million a year net increase in its education service revenue budget, which was consistent with earlier estimates.
- In accordance with good practice the council assembled a strong and appropriate project management structure.** The council did not achieve an

initial very tight timetable to enter into a PFI contract by the end of 2001 but did largely achieve a revised and more realistic procurement timetable set in early 2000.

6. **From the outset the council generated satisfactory market awareness of the project and created the conditions for an effective competition.** The council selected three well-qualified consortia to proceed to the main competitive negotiation stage in May 2000. Though none of three resulting proposals in August 2000 satisfied the affordability requirements, the council concluded that two were sufficiently compliant to proceed to a best and final offer round of bidding, which started in October 2000. Selection of the single preferred bidder in December 2000 was a rigorous and fair process.
7. **The council ensured the PFI deal stayed affordable with no significant increase in net contract costs during eight months of exclusive negotiation with the preferred bidder.**
8. **The result of the public sector comparator (PSC) test does not indicate decisive evidence that the PFI deal offers the most economic option compared to conventional procurement.** The council's analysis is that the net present cost of the PFI deal was some £2 million (5%) lower than the estimated cost of the PSC. In many ways the council completed the analysis professionally and prudently to provide a reasonable broad value for money benchmark, though there are areas where it is possible to make other assumptions that affect the outcome of the analysis. The analysis confirms there is significant potential benefit from improved risk management from the PFI option, though there is no strong evidence decisively in favour of the PFI contract. Some or all of the apparent margin in favour of the PFI option could reflect estimating uncertainty as much as real efficiency benefit.
9. **Progress of the contract implementation and works so far is consistent with the planned timetable.** The council has established dedicated teams to monitor and confirm satisfactory delivery of the contract obligations and as the basis for approving payments to the PFI provider. Though it remains early days the council's construction monitoring shows generally satisfactory results to date. Regarding the service delivery elements of the PFI contract, while there was some initial under performance in relation to cleaning at one school this has been corrected and overall the council monitoring team is satisfied with the level of service provided under the PFI contract and the positive relationship established with the provider.

Glasgow Schools Project 2002

Accommodation services for 11 new build, eight extended and refurbished and ten refurbished secondary schools and one new build primary and nursery school; associated ICT services for the secondary schools

Forecast contract cost:	£1,444 million (cash, undiscounted over 30 years) £434 million (real, discounted at 6% a year, January 2000 base)
Contract payment for 1st full year:	£41.5 million (£26.8 million net after level playing field support)
Full service period:	30 years (ICT contract 12 years)
Signed:	June 2000
Full service commences:	August 2002 (payment for first 10 schools commences August 2001)
End of contract:	2030 (ICT 2012)

- The key value for money driver for the PFI project was rationalisation of Glasgow's entire secondary school estate in order to move resources from unnecessary space to where they are most needed.** The requirement for the PFI service followed the council's comprehensive strategic review of its secondary estate needs. Overall the PFI project is designed to match better the changed needs of a smaller school population and will result in a much better match between supply and demand than previously, at least initially. Under the existing level of S94 capital consents PFI was the only option that would address the urgent requirement for improvement in a reasonable timescale.
- It is possible that secondary school rolls in Glasgow will fall significantly below current levels over the 30 years PFI contract.** For the PFI project the council assumed that overall school rolls would stay at current levels (some 29,000 pupils) for the foreseeable future. However, the General Register Office for Scotland forecasts that, in line with national trends, the population of Scottish children aged 12 to 17 years will fall markedly in the long term, by almost one quarter over the PFI contract period terminating in 2030. It is uncertain how the council might respond if this trend materialises and there is a need to further reduce capacity. However, there is flexibility within the PFI contract permitting removal of upto five schools or increasing the provision in designated areas for future expansion at some schools should this be necessary. This is subject to adjusting payments so that the PFI contractor is left in at least the same financial position.
- In accordance with good practice the council prepared for the PFI contract carefully and took care to express the service requirements with no unreasonable constraints on design or innovation.** Overall the outcome of the PFI competition suggests that the council were effective in securing innovative and effective proposals from the winning bidder.
- In accordance with good practice the council assembled a strong and appropriate project management structure.** The council did not achieve the initial very tight timetable to enter into a PFI contract. However, full service is due to commence in August 2002, which means the project overall will take some four years from inception to service commencement. While some much smaller PFI schools deals have been completed in around three years, the Glasgow project is large and complex even by PFI standards and completion by August 2002 will represent a significant achievement.
- From the outset the council generated satisfactory market awareness of the project and created the conditions for an effective competition.** The council selected four well-qualified consortia to proceed to the main competitive

negotiation stage in November 1998. All four resulting bids in March 1999 were assessed to be technically compliant, though there were significant differences in how each bidder proposed to address the council's main requirements. From the four bids in March 1999 the council selected two for the best and final offer bidding round that started in May 1999. Selection of the single preferred bidder in November 1999 was a rigorous and fair process.

6. **Against a tight overall completion timetable it was difficult for the council to maintain negotiating pressure on the preferred bidder during the eight months final pre-contract negotiations.** The council intended that final negotiation with the preferred bidder would result in a contract within two months but in the event there was extensive detailed negotiation on diverse design, legal, commercial and financing aspects before the contract was agreed. This reflected in part the pathfinder nature of this deal, where Treasury were looking to establish benchmarks on standardisation of contracts and issues such as insurability. During this eight months negotiation period the estimated lifetime net present cost of the PFI contract to the council increased by 6%. The largest part (4%) of this increase was the result of a combination of an increase in prevailing interest rates, which was outside both parties' control, and extra provision required by the council. In order to help achieve the planned full service start date (August 2002), the council entered into a preliminary agreement with the preferred PFI bidder five months before the full PFI contract was signed.
7. **The result of the public sector comparator (PSC) test does not indicate compelling evidence that the PFI deal offers the most economic option compared to conventional procurement.** The council's analysis is that the net present cost of the PFI deal was some 5% lower than the estimated cost of the PSC. In many ways the council completed the analysis professionally and prudently to provide a reasonable broad value for money benchmark, but there are areas where it is possible to make other assumptions that affect the outcome of the analysis. Nevertheless, despite this question mark, there is other evidence that the PFI route does provide significant, value for money benefits to the council. In particular the evidence suggests the winning PFI bidder's project solution in this case offers intrinsic benefits that the council could not have obtained from any other provider. Notwithstanding the calculation of a PSC to test the value for money of the deal the Council does not believe that it had the capacity to implement a project of this scale in the timescales set.
8. **Progress of the contract implementation and works is so far consistent with the planned timetable.** The PFI provider took full responsibility for management of the project schools from August 2000 and full service delivery in the new build/refurbished/extended schools is due to commence in August 2002. The council has established dedicated teams to monitor and confirm satisfactory delivery of the contract obligations and as the basis for approving regular contract payments to the PFI provider. The council's construction monitoring shows generally satisfactory results to date and the project is on schedule for completion by the required date. Four schools had been completed and made fully available under the PFI contract and another five were due to do so by the end of October 2001. At the beginning of May 2002, the council informed Audit Scotland that all work on project schools was either on or well ahead of schedule. Regarding the service delivery elements of the PFI contract, while there was some initial under performance in relation to one aspect (cleaning), overall the Council monitoring team is satisfied with the level of service provided under the PFI contract and the positive relationship established with the providers.

Balfron High School, Stirlingshire

Accommodation services for one new secondary school

Forecast contract cost:	£71 million (cash, undiscounted over 26.5 years) £23 million (real, discounted at 6% a year, August 1999 base)
Contract payment for 1st full year:	£2.0 million (£0.4 million net after level playing field support)
Full service period:	25 years
Signed:	March 2000
Full service commences:	August 2001
End of contract:	2026

- A main driver behind the PFI project was the opportunity to advance investment in a much-needed new school to replace existing inadequate accommodation.** The condition of the existing Balfron High School meant a new school was an investment priority substantially ahead of any other work on the council's other 48 primary and secondary schools. The council saw the PFI process as an opportunity to secure value for money by clear focus on its underlying service requirements, with opportunities and incentives for private sector bidders to innovate to achieve the council's objectives. There were no more specific objectives or expectations concerning value for money from the PFI project at the outset.
- The council's requirements for the new school were in some respects unique, exceeding equivalent provision in other newly provided PFI schools in Scotland.** The overall space provided is equivalent to almost 14m² per pupil place whilst other schools typically provide 10m² or 12m². The council's accommodation brief for the PFI school followed careful consideration of the underlying educational requirements and the need for the accommodation to be high quality, adaptable and capable of absorbing change. In this rural area the school also has an important community role, for which additional space has been provided. The space provided at Balfron is a matter for the council but the variation in standards of provision indicates a need for establishing greater consensus on best practice and standards for school design in Scotland.
- In accordance with good practice the council assembled a strong and appropriate project management structure.** The council did not achieve the initial timetable to enter into a PFI contract less than a year after commencing the main competition phase. However, the full PFI service commenced in August 2001, largely in accordance with the agreed timetable and only about two months later than had originally been planned.
- The PFI financing in this case is technically novel and economic though with a more adverse risk profile for the council.** Ninety per cent bank lending and 10% equity or near equity investment is typical of PFI schools projects but in this case 99% of the necessary funding comes from a bank and 1% is equity. Since bank debt is generally cheaper than equity investment the higher debt: equity ratio in this case has helped reduce the overall interest costs associated with the PFI contract to some 5% a year in real terms. In other projects banks have required higher equity investment because this helps to protect their own stake. In this case instead the council guarantees a floor payment of about 60% of the annual unitary charge to the PFI provider, irrespective of the latter's actual contract performance, substantially reducing the risk to the bank. In return the parent company of the PFI provider guarantees its performance (and this guarantee is in turn supported by a form of insurance), so that if the PFI provider does not

deliver the council may seek compensation from the parent (or its insurers). This helps to reduce the additional risk the council is exposed to, though in certain extreme situations (including contract termination for serious under performance) the council's position is less secure than in other contracts.

5. **Refinancing of the project in March 2001 raises a question whether the original financing was as competitive as possible.** The guaranteed element of the unitary charge noted above represents a substantial covenant by the council in favour of the PFI provider. This meant the financing was cheaper than some other possible structures because it also had a lower risk profile for investors. But the arrangement had not been subject to a full market test as part of the original PFI competition because it had arisen as a variant bid from only one bidder (the eventual winner). In March 2001 the PFI provider refinanced the project by selling at a profit the guaranteed income stream to the same bank that had originally funded it. The profit element of the refinancing is related to the decision of the bank to offer a lower margin than originally required on its lending to the project because of the Council's payment covenant. The Council received about £0.3 million, ie, 50% of the estimated net profits of this refinancing after allowing for the recovery of costs incurred in the refinancing, tax and reductions in dividends otherwise payable to the equity investors in the project.
6. **In other respects there was adequate competitive tension.** While there is a question about the competitiveness of the financing terms there is no reason to doubt other aspects of the economy or the quality of the winning bid, which was assessed to be the most economic and most beneficial in non-financial terms.
7. **The result of the public sector comparator (PSC) test does not indicate compelling evidence that the PFI deal offers the most economic option compared to conventional procurement.** The council's analysis is that the net present cost of the PFI deal was 11% lower than the estimated cost of the PSC. In general the project team prepared the PSC estimates carefully and objectively. Nevertheless much of the saving the council has demonstrated in favour of the PFI contract compared to the estimated costs of the PSC could reflect estimating uncertainty as much as real efficiency benefit. In Audit Scotland's view, while there are likely to be some areas of economy and particular benefits from risk transfer under the PFI contract, in other areas the evidence is that the PFI provider's costs may be higher or at least no lower than equivalent expenditure that may be expected under other forms of procurement.
8. **The council is adopting a more deliberate approach to monitoring PFI contract service.** Late completion of some construction work resulted in handover of the school to the council in August 2001 six days late. The council made reduced payments to the contractor over the following month until certain specified outstanding works were completed, and the contractor's response to this problem confirms better risk management is an important potential benefit of PFI to the council as client. Excluding the delay in completion of construction the service under the PFI contract appears to have been substantially as the council required. However while the available evidence suggested the PFI contractor was generally delivering as required, the position was not clear cut and until January 2002, reflecting a continuing focus on resolving construction related aspects, the contractor's reporting of other aspects of service performance and the council's own review arrangements were not fully systematic. The council has since introduced improvements to provide more deliberate emphasis on actual performance and availability achieved under the contract.

Falkirk Schools Project

Accommodation services for three new build secondary schools, one new build/refurbished secondary school and one special needs school

Forecast contract cost:	£341 million (cash, undiscounted over 25 years) £107 million (real, discounted at 6% a year, March 1998 base)
Contract payment for 1st full year:	£11.9 million (£3.3 million net after level playing field support)
Full service period:	25 years
Signed:	August 1998
Full service commences:	August 2000
End of contract:	2025

- A main driver behind the PFI project was the opportunity to advance investment in a much-needed new school to replace existing inadequate accommodation.** The council saw the PFI process as an opportunity to secure value for money by clear focus on its underlying service requirements, with opportunities and incentives for private sector bidders to innovate to achieve the council's objectives. The five schools were selected after an audit of current facilities in 1996 to assess shortfalls in building structure as well as the ability to meet the requirements of the modern curriculum. The schools required replacement/major investment, due to a combination of age, condition, backlog maintenance, inadequate facilities, and poor/ inefficient location. The council assessed its four other existing secondary schools as satisfactory under the same criteria and excluded them from the project. The council could not otherwise have afforded similar investment because of S94 consent constraints.
- There are strategic questions about whether the specification was fully suitable for guiding the provision of accommodation over the 25 years contract.** Demand is difficult to predict over the full contract period, but the PFI schools can accommodate some 6,100 pupils, 20% more than the forecast maximum of 5,100 pupils by 2007 and it is not clear the council achieved the optimum balance between capacity and demand.
- The council saw from the outset the importance of affordability as a key constraint.** There was early analysis of what the council could afford, though initially no bidder offered proposals that satisfied the council's specified affordability limit. Subsequent negotiation with bidders and improvements in level playing field support resulted in contract payments that could be accommodated without significant increases in the overall secondary education budget, though at a higher level than originally anticipated.
- Project management was effective.** The council project team was established in January 1997 and has substantially achieved the original programme for the PFI project. At key stages and decision points the project team briefed members of the council on the development of the project in detail. There appears to have been an effective negotiating strategy by the council's project team and their external advisers. While the final negotiation period was extended, the winning bidder was able to complete necessary construction works within two years, and manage the transfer to the new accommodation, ready to commence full service delivery by the due date of 20 August 2000.
- There was adequate competitive tension.** At the outcome of the main competitive phase of the negotiation the council selected a preferred bidder

(the PFI provider) whom they assessed as clearly superior in all evaluation areas. The council appears to have maintained the competitiveness of the preferred bidder's proposals during the final period of exclusive negotiation prior to financial close and contract award.

6. **It is difficult to say whether the apparent economy in favour of the PFI contract truly represents real efficiency and the benefits of better management and innovation.** The council estimated the cost of the PFI deal to be some 7% lower than the cost of the council's reference bid (public sector comparator). However Audit Scotland's view is that major elements of cost in the reference bid are subject to significant uncertainty, and although a PFI contract may provide economies we have seen no analysis of why savings of the order suggested are plausible in this case.
7. **Overall the outcome of the project is the provision of generally high or very high quality facilities with protection for staff transferred.** The PFI provider opened the new schools on time in August 2000, with apparently a positive impact on morale and motivation of both teachers and pupils since then. "Super TUPE" clauses in the PFI contract also protect for five years after transfer the terms and conditions of some 100 former council employees transferred to the private sector.
8. **The council's monitoring to date indicates that the PFI provider are providing all services efficiently and effectively, in accordance with contract standards.** While there have been differences (not yet fully resolved) between the council and the PFI provider on some contractual aspects the outcome is unlikely to increase significantly the council's costs. Monitoring and feedback from users since the new schools opened in August 2000 indicates that levels of service for cleaning and site supervision are broadly equivalent to those obtained previously. Schools are very pleased with the catering service, overall demand is up 16% and the uptake of free school meals has increased significantly.

Glossary

Conventional (or traditional) procurement

A contract in which a council procures major capital works financed by borrowing on its own account. Such projects are generally paid for in full shortly after construction is completed. Subsequent operation and maintenance of the new facilities is procured separately.

Demand risk

For PFI schools contracts, the extent to which the number of pupil places actually required by councils may vary, generally downwards, from the fixed number of places contracted for. Councils take this risk as they are better placed to manage the catchments and placement requests for schools that determine demand.

Discounting (and discounted cash flow)

In general, people value £1 received today more highly than £1 received at a future date. To reflect this in project costing and appraisals, amounts due to be paid or received at future dates are discounted to provide a present equivalent value expressed as a single sum. See Exhibit 35 for a fuller explanation.

Financing costs

In any project requiring financial investment there is a financing cost. In PFI schools projects the financing cost incurred by the PFI provider is part of the project costs and adds to the level of charge the council pays in return for the service. The main elements of the financing costs in these projects are the direct costs of obtaining and servicing loans and the dividends payable to the equity investors in the project.

Level playing field support

For conventional procurement the Scottish Executive may grant councils Section 94 borrowing consents and reimburse them for the interest and repayment costs over the period of the debt. Level playing field support is the equivalent for PFI, whereby the Scottish Executive provides grant based on a calculation of the notional financing costs of providing the assets obtained through a PFI contract.

Output specification

A detailed specification for the accommodation and services required, set in terms of outputs not inputs. For example, the temperature required is specified but not the heating system; a classroom is required to accommodate 33 pupils but its size is not specified.

Private Finance Initiative (PFI) schools contracts

The Private Finance Initiative involves contracting with the private sector to finance, build, extend or refurbish specific schools and to manage these schools for an extended period, usually 25 to 30 years. At the end of the contract the schools generally pass to the ownership of the council at zero cost.

PFI provider

A PFI provider is a private sector entity, usually a special purpose company (SPC), established by the consortium of private sector interests that have won the competition to provide the PFI service. Typically each consortium comprises banks, construction and facilities management companies.

Preferred bidder

A point is reached in the contract bidding process where one bidder emerges as best qualified to meet a council's requirements in terms of price, quality, technical and educational criteria. At this stage it is nominated preferred bidder and negotiations continue with it alone until the deal is concluded. To provide competitive tension, the council may hold a second bidder as a reserve.

Public Sector Comparator (PSC)

The PSC is an estimate of what it would cost to provide a similar level of output to the PFI contract using traditional (non-PFI) procurement. Exhibit 33 is a brief summary of the relevant principles for such appraisals, together with further more detailed guidance regarding the PSC that HM Treasury issued in 1999.

Public Private Partnership (PPP)

PPP is the umbrella description of the partnership between the public and private sectors to deliver modern and effective public services. It is intended to combine private sector capital, skills and experience with the high standards and commitment found within the public services. PPP is not a single model but a tailored approach to the particular circumstances of public services. The PFI has been the main vehicle for delivering PPPs to date.

PWLB (Public Works Loan Board)

The Public Works Loan Board is an independent public body delivering functions under the Public Works Loans Act 1875 and the National Loans Act 1968. It considers loan applications from local authorities and other prescribed bodies and, where loans are made, collects the repayments. Nearly all borrowers are local authorities requiring loans for capital purposes authorised by Government departments. Moneys are drawn from the National Loans Fund and the Treasury determines rates of interest.

Risk

An outcome that has an adverse effect on the outturn of a project through increases in direct costs or time delays leading to additional costs. Each identified potential adverse outcome is recorded in a risk register and its potential impact on the project cost is assessed in terms of its likelihood (ie probability) and its cost. The sum of all individual risk valuations presents the most likely additional cost in addition to the estimated base cost of a project.

Reconfiguration risk

Reconfiguration risk arises from the possibility that, due to changes in curriculum delivery over the 25 to 30 years of a PFI schools contract or changes in demand for pupil places, accommodation may need to be added, altered or given up to secure efficient and effective operation of the school.

Section 94

Section 94 of the Local Government (Scotland) Act 1973, as amended by section 117 the Scotland Act 1998, requires that "councils shall not incur any

liability to meet capital expenses without the consent of Scottish Ministers”. Councils are therefore barred from borrowing for capital projects without the consent of the Scottish Executive.

Special purpose company or vehicle (SPC/V)

A company created and owned by the consortium of private sector interests involved in the provision of the schools and services in a PFI deal and established to provide the legal focus for the relationship between the consortium and the council. The SPC's sole business is to provide and operate the PFI facilities in return for payment for services by the council, but it will usually sub-contract the main aspects of the project to other organisations.



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