DEPARTMENT FOR INNOVATION, UNIVERSITIES AND SKILLS
LEARNING AND SKILLS COUNCIL

Renewing the physical infrastructure of English further education colleges

REPORT BY THE COMPTROLLER AND AUDITOR GENERAL | HC 924 Session 2007-2008 | 11 July 2008

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Tim Burr
Comptroller and Auditor General
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7 July 2008

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SUMMARY

1 Each year around 3.3 million young people and adults attend courses or training provided by one of the 376 further education colleges (including sixth form colleges) in England. Colleges are independent corporate bodies that operate on a not-for-profit basis, and the Government sees them as having a central role in equipping young people and adults with the skills for productive, sustainable employment. The Department for Innovation, Universities and Skills (the Department) has overall responsibility for the delivery of government objectives through the further education sector and its non-departmental public body, the Learning and Skills Council (the Council), plans and funds further education in England. By 2010, the Council will have handed over its functions to 150 local authorities, a new Skills Funding Agency, and a new Young People's Learning Agency.

2 Colleges were incorporated in 1993, taking over ownership of their land, buildings and reserves from local authorities. Much of the physical infrastructure was in poor condition, and many buildings required urgent health and safety-related repairs, were unattractive to potential learners, unsuitable for modern learning, inaccessible to people with disabilities and inefficient to run. Between 1993 and 1996, the Learning and Skills Council's predecessor, the Further Education Funding Council provided colleges with funding, mainly for projects related to addressing health and safety issues, and very limited funding was available in the next two years.

3 From 1999, the then Department for Education and Skills obtained capital funding for the Further Education Funding Council to distribute to colleges for capital projects. This programme was continued and expanded when the Learning and Skills Council was created in 2001. At around 9 million square metres, the Learning and Skills Council considered that the estate, at incorporation in 1993, had been much bigger than was needed and there was still scope for rationalisation in colleges, including through their disposal of surplus land and buildings. The Council therefore expected colleges to provide the majority of their project costs through disposal of any surplus assets, taking out loans secured on their assets, and use of reserves. The Council requires colleges to examine whether they could obtain better value for money through private finance or public-private partnerships (PFI/PPP). After examining the options, almost all colleges have chosen to proceed on a grant-funding basis, reflecting in many cases their ability to part-fund projects through asset disposals, reserves and borrowings. The scale of most projects is also unlikely to be sufficiently large to generate interest among private contractors in PFI/PPP deals with further education colleges.

4 Between April 2001 and March 2008, the Learning and Skills Council approved colleges' projects at the final detailed application stage with a total cost of £4.2 billion and grant support totalling £1.7 billion. These projects are intended to provide colleges with the modern learning spaces and facilities needed to deliver a wide range of courses and to make colleges more attractive to potential learners and employers. Colleges, as independent corporations, decide their procurement strategies and are responsible for delivering their projects.

5 With the Learning and Skills Council's capital programme for further education colleges now well underway, this report sets out the background to the sector and its physical infrastructure (Part 1) and evaluates:

- the Council's co-ordination of college projects in the overall programme, the procurement approach used by the Council and colleges, the support given to colleges and the delivery of projects to cost and time (Part 2); and
- the impact of the programme, focusing on the progress made across the sector, the quality of the buildings and the indebtedness of the sector (Part 3).

We did not seek to evaluate decisions on the rationalisation of estates or mergers of colleges. We obtained evidence from a range of sources including visits to colleges, a survey of colleges, interviews and data analysis: our full methodology is set out in Appendix 1.

Main findings

On the procurement approach, support for colleges and delivery of projects:

6 The grant-based approach to project funding has been successful in delivering effective projects, although some of the early projects may have been over- or under-funded by the Learning and Skills Council. Colleges have made good use of the grants offered by the Learning and Skills Council, and they obtained substantial additional funding from the disposal of surplus assets, taking out secured loans and use of their reserves. However, before September 2003, in calculating its grant support, the Council placed limited emphasis on how much a college could afford to contribute and continued the Further Education Funding Council's practice of usually restricting funding to 35 per cent of project costs. If a college's proceeds from the sale of assets exceeded 65 per cent of the project costs, however, the Council's policy was to abate its grant by an amount equivalent to that excess. Between June 2001 and August 2003, 207 (74 per cent) of the 281 projects receiving detailed approval were funded at 35 per cent of the total cost. Some of these colleges may have required less grant funding for their projects to be viable while others may have had to restrict their project ambitions.

7 The organisation and funding of the programme has meant that there has been no national prioritisation of projects, but programme management has improved over time. The Learning and Skills Council initially operated through 47 local Learning and Skills Councils, which might have made it difficult to prioritise projects at a regional or national level. Until it began to fund higher proportions of project costs from about 2004, to build on the strengths of the further education sector early in the capital programme the Council gave priority to projects at colleges that were willing and able to majority fund themselves. In 2006, following internal reorganisation, the Council's regional operations took on planning functions and prepared regional capital strategies that aimed to help target project funding so as to balance educational and property priorities. As a consequence of the initial arrangements, some areas and colleges with the greatest need have not received the highest priority.

8 Colleges are now using more modern procurement strategies, but there is still scope for improvement. Increasingly, colleges have reduced the risk of cost overruns by making more use of design and build contracts rather than traditional contracts. Some colleges could, however, engage their main contractors earlier so that more construction expertise is brought to bear in making decisions on the detailed design of their buildings. This would help improve the value for money of the buildings by better allowing for their 'buildability'.

9 Most colleges are satisfied with the advice they receive, but client support could be developed further to help colleges in being effective clients. Most colleges are inexperienced clients and rely on professional advisers, and they are generally satisfied with their support. The Learning and Skills Council's introduction in April 2008 of framework contracts for appointing consultants should help assure the quality of advice received. The Council's relatively small capital team also provides good quality support to colleges and publishes a range of guidance. As projects become larger and more complex, there is a need for more training for colleges in being an effective client and increased coordination of the expertise that now exists in many colleges that have completed major projects.

10 Projects are usually delivered on or close to their budgeted cost. Colleges have focused on avoiding cost overruns, which they would normally need to finance themselves without additional grant from the Learning and Skills Council. Thirty-eight colleges (27 per cent) in our survey reported an overrun (averaging £0.9 million), including 11 colleges with an overrun exceeding 10 per cent of the project cost. In some cases, colleges decide that there are good reasons for them to bear the cost of an overrun rather than reduce the scope of their project. Overruns are now being minimised by the Learning and Skills Council requiring more certainty of costs before approving projects and through colleges avoiding late changes in design, reducing the scope of projects where necessary, and using contract strategies that minimise cost uncertainty.

11 The Learning and Skills Council and colleges need to give more attention to the whole life costs of new buildings. The long term value for money of new or refurbished buildings depends not only on the initial capital cost but also the implications of the design for the building's whole life running and maintenance costs. It is important therefore that capital expenditure decisions take account of whole life costs. The Learning and Skills Council's approach to programme management has, however, tended to encourage colleges to make detailed design decisions more by reference to the affordability of the upfront capital costs than to the whole life costs. The Learning and Skills Council intends to address this issue in its revised financial appraisal methodology later in 2008.

12 Management information on the national programme is inadequate. The Learning and Skills Council relies on spreadsheets for management information, but such systems are not sufficiently robust for a programme of this scale. There are also areas where information needs to be better collated, such as the actual costs of completed projects, contract strategies used and the lessons learned that colleges have identified from their completed projects. The Council is planning to develop a mangement information and budgeting system that is intended to address these concerns.

On the outcomes of the programme:

13 The Learning and Skills Council and colleges have made good progress overall in renewing the physical infrastructure of the further education sector since 2001, but some regions have made much more progress than others. In 2001, many college buildings were ageing and their quality and fitness for purpose was often unsatisfactory, affecting the reputation of the sector. By 2008, around half of the estate has been renewed and the Council plans that the rest of the work will be completed within about eight years. The nine regions varied substantially, however, in the proportion of their infrastructure that was estimated to have been renewed or have an approved project as at May 2007: from 63 per cent in the South West to 32 per cent in Greater London, where projects are often large and complex.

14 Completion of the programme by 2016 will require careful risk management and prioritisation of the capital funds available to the Council's successor bodies. Colleges still to be renewed may be less financially strong or less able to contribute through applying reserves, disposing of assets or raising of loan finance. The cost of renewing the remaining colleges is becoming more expensive, putting the affordability of the programme at risk within the limits of the Learning and Skills Council's capital budgets. The Council will need to consider how best to prioritise funding or encourage colleges to use procurement strategies that require less upfront public funding.

15 In most respects, the quality of new or refurbished buildings is high and they meet the needs of colleges and learners. The renewed buildings usually improve the external appearance of colleges and provide up-to-date facilities for academic and vocational learning. We found that most learners and staff were very satisfied with the buildings, and 97 per cent of the colleges in our survey considered that their renewed building was excellent or good. Some of the ten colleges we visited highlighted problems with social spaces and ventilation systems.

16 The environmental sustainability of college buildings was given relatively little emphasis in the early years of the programme, but the Learning and Skills Council is now raising its profile. The first projects started before the importance of sustainability in new buildings was so widely recognised, and the first new buildings reflect that. There is little evidence from BREEAM assessments (of environmental performance), because these were rarely undertaken and only became mandatory from 2007. The Council is now working towards a target to achieve 'zero carbon' for new college developments by 2016, but it recognises there is scope for it to expand the collection and dissemination of better information on best practice and energy consumption in new and existing buildings. The Council's estates management database, 'eMandate', already provides some useful comparative data for colleges. The Council intends to do more to encourage colleges to apply the Office of Government Commerce's 'Quick Wins' to improve the sustainability of college designs.

17 Projects appear to be linked to improved learner participation in colleges. Most projects replace buildings that were unfit for purpose and are also intended to improve the attractiveness of the college to potential learners. Research on some of the earliest projects indicates that renewal helps colleges to recruit learners – for example, a college with a completed £5 million project on average is likely to have about 300 more learners a year than a similar college without a project. Some of these gains are likely to be at the expense of other providers. For some colleges, a project is very important to them for ending decline in the numbers of learners which may be linked to poor facilities.

18 The funding arrangements have required colleges to increase their external borrowings which, although currently lower than debt levels in higher education, add to financial risks in the sector. The programme has resulted in college debts increasing from around £200 million (in 2001-02) to £731 million of long term loans (in 2006-07), and they will continue to rise rapidly. Between 2005-06 and 2006-07, the number of colleges that were assessed as being financially weak increased by 21 (from 68 to 89). Colleges with large debts could be more vulnerable to loss of income if they fail to generate the projected demand for courses from employers and learners (as set out by colleges in their applications for capital funding). The overall level of external borrowings by further education colleges, at 12 per cent of their income by the end of 2006-07, was lower than that of the higher education sector which had long term borrowing equivalent to 19 per cent of its income. At one per cent of college income, interest payable remains affordable for the sector as a whole but 19 colleges had long term borrowings of more than 40 per cent of their income in 2006-07.

19 Transfer of responsibility for the future management of the programme will need to be closely managed. By 2010, the Learning and Skills Council will have closed and its responsibilities passed to 150 local authorities, a Skills Funding Agency and a Young People's Learning Agency. Following a consultation process, the Department for Innovation, Universities and Skills will manage the handover process and, with the Department for Children, Schools and Families, decide how the capital programme will be managed. The Department for Innovation, Universities and Skills will need to maintain a clear visibility of the programme.

Overall conclusion on value for money

20 The design of the capital programme for further education takes advantage of colleges' accumulated reserves, their access to secured loan funding and their scope to dispose of surplus assets. The joint funding approach, with the Learning and Skills Council providing additional grant funding, is enabling the sector to make good progress in rationalising its estate: by 2008, around half of the renewal of the estate had been completed or had received approval for a project to proceed. Relatively poor facilities have been replaced by new or refurbished facilities that are generally of high quality and meet the needs of learners, and the Council has recently been able to increase the approved benchmark costs for projects, which should further improve the quality of the new facilities and allow colleges to respond to the need for enhancing environmental sustainability.

21 The funding approach used prior to September 2003 was relatively unsophisticated in that most projects were funded at a standard grant rate, resulting in some over-funding of projects and some projects that colleges needed to scale down. The Learning and Skills Council has since determined grant rates so that they better reflect colleges' financial strength. The programme has entailed an increase in the sector's long term indebtedness, to £731 million in 2007. For the sector as a whole, interest payable remains affordable, at around one per cent of college income, but a small proportion of colleges now have large debts and could be at risk if they experience a reduction in demand for their courses.

Recommendations

22 Our recommendations are aligned with our main conclusions and are aimed at supporting the Department, the Learning and Skills Council (and its successor bodies from 2010) and colleges to further improve the value for money of the programme.

i **Given the planned changes to the further education system, the Department needs clearer visibility of the programme to achieve a smooth transition of the programme from the Learning and Skills Council to the successor bodies.** The Council has had a key role in managing the capital programme. With the dissolution of the Council by 2010, the Department will need to provide continuity of standards in programme management and the setting of programme targets in a clear policy context. To enhance the Department's oversight, it could commission an independent Gateway Review of the programme before it is handed over to the Council's successor bodies. The Department should also be party to the decision on how best to prioritise future projects for funding.

ii **The condition of the physical infrastructure and the progress made in renewing it varies by region of the country.** The Learning and Skills Council should examine whether it needs to provide more support to capital projects in some regions, such as Greater London, where there has been less progress. For the renewal programme to be completed by 2016, the Learning and Skills Council will need to consider the scope for encouraging and supporting colleges in using different procurement strategies.

iii **Progress in improving the environmental sustainability of renewed buildings is hampered by a lack of information.** As part of the post project review process, the Learning and Skills Council should make it mandatory for colleges to assess and report whether they have achieved the sustainability outcomes (including energy consumption) that their new buildings were designed to provide, and to report on their implementation of the Office of Government Commerce's 'Quick Wins' for improving the sustainability of new buildings.

iv **Major decisions in projects are based largely on initial costs rather than whole life costs.** Whole life costs are difficult for colleges to measure, so the Learning and Skills Council should work with industry professionals to develop a suitable approach to incorporating whole life cost considerations into the feasibility, design and construction stages of a project.

v **There is an increasing risk that some colleges might take on more debt than they can service.** The Learning and Skills Council should keep under review its methods of assessing colleges' ability to afford new projects and the financial health of the sector. It should also pilot the use of professional advice for colleges in getting best value from loan finance.

vi **Some colleges are under-prepared and their procurement strategies need to improve.** Whilst the Learning and Skills Council is now addressing client capability, the Council should examine colleges' appraisal of procurement strategies and the performance of the strategies used, including consistency with good practice. In addition to the Council's approval processes, Gateway Reviews of the major projects (now available to colleges through the Council's new consultancy frameworks) could be used to provide independent assurance on colleges' internal project management arrangements and their preparedness to proceed to the next stages of a project. The Council should step up its encouragement of colleges to engage earlier with main contractors and, in considering a possible new framework for contractors, investigate how it might facilitate more integrated working at an earlier stage.

vii **There is a continuing need for improving client capability and sharing expertise, particularly as projects become larger and more complex.** The Learning and Skills Council should take steps to assist colleges new to the programme by using the skills developed within colleges that have already delivered their projects successfully. There are a number of options including better guidance for colleges, training in project sponsorship, funded secondments of staff between colleges, and a shared service to help colleges perform their client function. It would also help colleges if they had access to case studies of projects with serious problems that had affected outcomes.

viii **Improving the quality and quantity of information collected would help improve the management and evaluation of the programme.** The Learning and Skills Council should give priority to completing the management information and budgeting system it is currently developing that aims to capture, analyse and report all of the key data that it needs to manage the programme most effectively and to enhance its support for colleges. It should improve the information captured by post project review processes in colleges, and regularly collate and disseminate the results to the sector. It would also be useful for the National Learner Satisfaction Survey to include questions on the suitability of accommodation and its impact on learners' study decisions.

PART ONE

The further education sector and its physical infrastructure

1.1 The physical infrastructure of further education includes the land, buildings, fixtures and fittings and equipment needed by colleges to deliver learning and administer their operations. In this part of the report we examine:

- the organisation of the further education sector and planned changes;
- the role of further education colleges;
- the importance and condition of the physical infrastructure of further education colleges; and
- the rationale for the programme and the initiation of infrastructure projects.

The organisation of the further education sector and planned changes

1.2 Responsibilities for the further education sector are shared between a number of organisations **(Figure 1 overleaf)**. The Department for Innovation, Universities and Skills (the Department) has overall responsibility for the sector. It oversees and provides part of the funding for the Learning and Skills Council. The Department for Children, Schools and Families has overall responsibility for education and training of young people up to the age of 19[1], some of whom are learners in further education colleges, and provides the rest of the funding to the Learning and Skills Council.

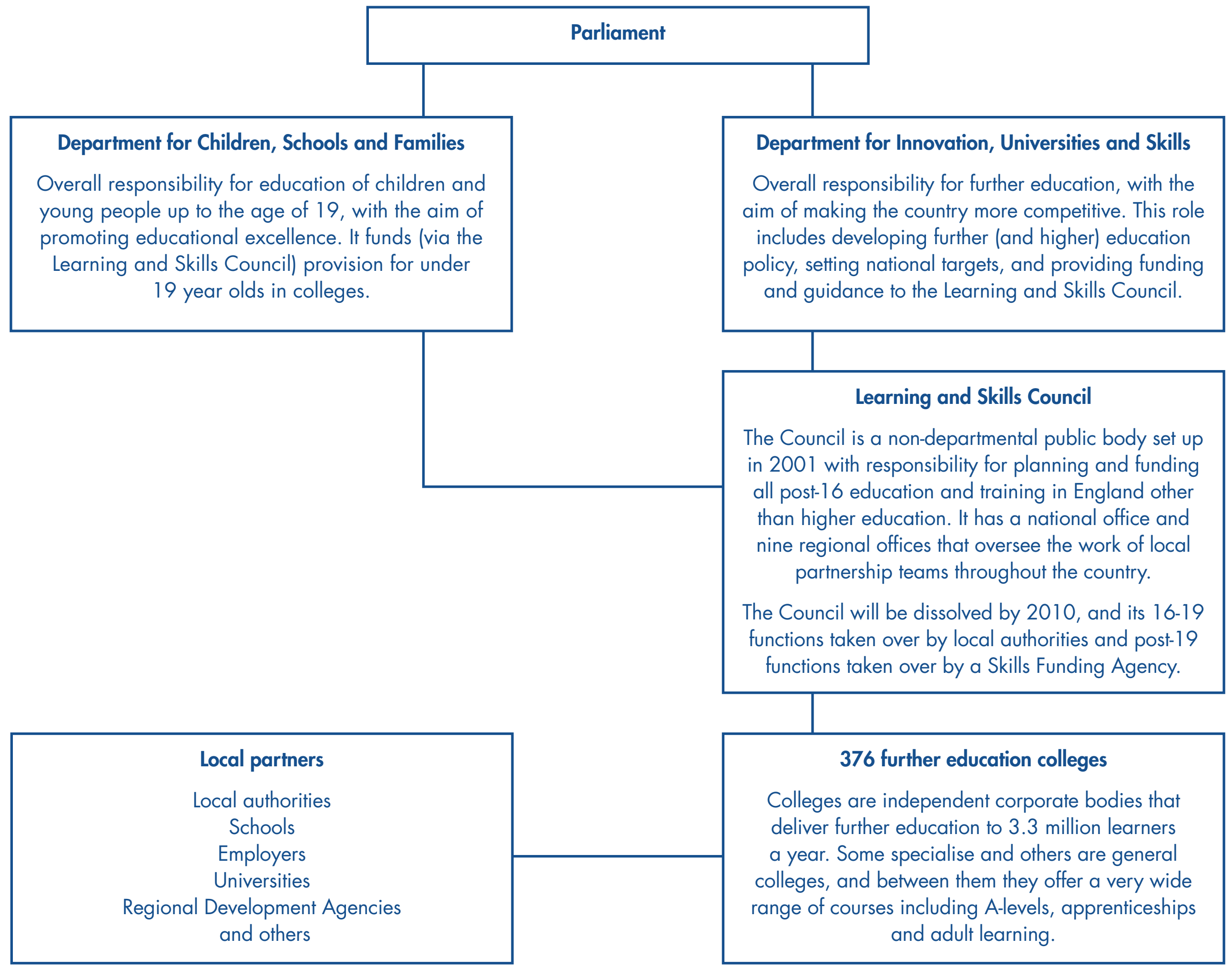
1.3 The Learning and Skills Council, a non-departmental public body under the sponsorship of the Department, was formed in 2001 and will plan and fund further education until 2010, when it closes as part of the Machinery of Government changes. These changes follow on from the separation in 2007 of the Department for Education and Skills into two departments (paragraph 1.2). The Government's intention in the latest changes is to make local authorities responsible for getting young people to stay on in education and training, as well as to provide a streamlined funding process to colleges and training providers so that they meet the needs of employers and learners. The Council's responsibilities for adult education will therefore be taken over by the new Skills Funding Agency, and its responsibilities for young people's education and training will be shared between the 150 local authorities responsible for learning and a new national non-departmental public body, the Young People's Learning Agency. The proposed changes are subject to consultation during 2008.[2] The Department anticipates that the Skills Funding Agency will take over the funding and management of the further education capital programme; it will make its decision together with the Department for Children, Schools and Families.

1.4 There are currently 376 further education colleges in England. Colleges were part of local authorities until the Higher and Further Education Act 1992 (effective April 1993) which made them independent corporate bodies that operate on a not-for-profit basis. They educate and train 3.3 million young and adult learners each year, and around £5.6 billion (84 per cent) of their total income of £6.7 billion in 2006-07 came from the Learning and Skills Council. Colleges work with a range of organisations, including schools, higher education institutions, employers and local authorities.

1.5 The Learning and Skills Council is responsible for monitoring colleges' compliance with the terms and conditions that it attaches to its funding to colleges. It must be satisfied that colleges have appropriate arrangements for governance, financial management, and securing value for money and that public funds are used in accordance with the purpose intended. Colleges require the consent of the Council for capital transactions exceeding the lower of £1.5 million or a sum equivalent to 5 per cent of their annual revenue, and for any capital-associated borrowing. Most colleges own some or all of their land and buildings

1 The Department for Children, Schools and Families is also responsible for Learners with Learning Difficulties and Disabilities up to the age of 25.
2 Department for Children, Schools and Families/Department for Innovation, Universities and Skills (2008), *Raising Expectations: enabling the system to deliver.*

1 Organisation of further education in England, 2008



Source: National Audit Office

and they can obtain loans, offering their premises as security where this is required. They must manage their premises with regard to the Council's guidance. Colleges' governing bodies are responsible for ensuring that funds are used in accordance with the statutory powers, the financial memorandum between the Council and the college and any other conditions imposed by the Council.

1.6 In addition to the structural changes (paragraph 1.3), the further education sector is experiencing major changes in the arrangements for providing and funding courses and learners. The main changes arise from the Leitch Review of Skills (2006), which reported that the UK's skills base was weak by international standards and change was necessary to prevent it from lagging behind key comparator countries. In response, the Government is committed to funding adult skills training increasingly through 'demand-led' mechanisms to reflect employer and learner needs (and hence the economic value of courses) rather than centrally planned provision. In particular, the new Train to Gain programme is expected to increase from 170,000 learners in the 2006-07 academic year to 870,000 in 2010-11.[3] Much of the other funding for adult learners will be routed through Skills Accounts and there will continue to be some funding available for other programmes to encourage adults back into learning. There will also be increases in young people in colleges with the phased introduction of 14–19 diplomas from September 2008 in schools and colleges and with the planned extension of compulsory education and training.

3 Learning and Skills Council (2007), *Statistical First Release – Further Education, Work Based Learning, Train to Gain and Adult and Community Learning – Learner numbers in England 2006/07*; Department for Innovation, Universities and Skills (2007), *LSC Grant Letter 2008-09*.

1.7 The number of colleges has reduced, mainly through mergers, from 422 in 2000 to 376 as at June 2008. The Department is aiming to encourage new providers into the further education market. In 2008, the Learning and Skills Council will announce arrangements for extending eligibility of capital funds to voluntary sector and work-based learning providers. Some colleges face increasing competition from school sixth forms and academies.

The importance and condition of the physical infrastructure of further education colleges

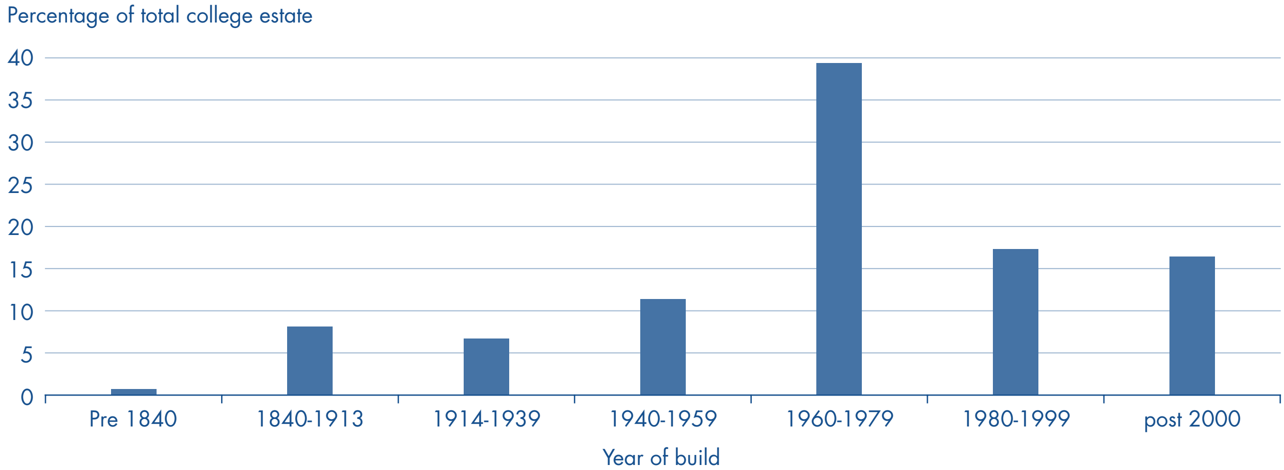
1.8 On incorporation in 1993, colleges took ownership of most of the land and buildings they occupied. These buildings varied widely in condition and functional suitability and many were in a poor state of repair. A major survey of the college estate commissioned in 1992 estimated the repair backlog to be £800 million. Between 1993 and 1996 the Learning and Skills Council's predecessor, the Further Education Funding Council, provided colleges with capital funding, mainly for projects related to addressing serious health and safety risks. Any colleges undertaking larger rebuild or renovation projects were generally only able to do so if they could fund it from their reserves, loans or asset disposals, or if they could demonstrate that the funding available for health and safety related building repairs would offer better value for money if spent on new buildings. From 1999, the then Department for Education and Skills obtained capital funding for the Further Education Funding Council to distribute to colleges for capital projects. This programme was continued and expanded when the Learning and Skills Council was created in 2001. The Report of the Foster Review of Further Education (2005) highlighted that many college buildings had been ageing and not fit for purpose. Common problems with the physical infrastructure included:

- unattractive physical appearance, which had a direct bearing on the reputation of the sector, creating poor perceptions in learners, employers and the community;
- too much space in too many buildings, often expensive to run and with poor energy efficiency;
- poorly configured buildings, with equipment not suitable for modern learning; and
- poor access for people with disabilities.

1.9 As at 2006, two-thirds of the infrastructure had been built before 1980 **(Figure 2)** and, according to returns submitted by colleges, much of it was in need of replacement or major refurbishment **(Figure 3 overleaf)**. The size of the estate was also too large, and some colleges owned valuable land that was not fully used and could be sold for development. The Learning and Skills

2 The age of college buildings, 2006

There was a wide range of ages of buildings, but only around 16 per cent of the area of the estate had been built since 2000.



Source: National Audit Office analysis of data supplied by 354 colleges to eMandate

NOTE
2006 was the first year when this condition data was available centrally for almost all colleges.

Council estimates that the sector needs 6.6 million square metres, rather than the nine million it took over in 1993 and the 7.4 million square metres it occupied in 2006.[4]

The capital programme and the initiation of projects

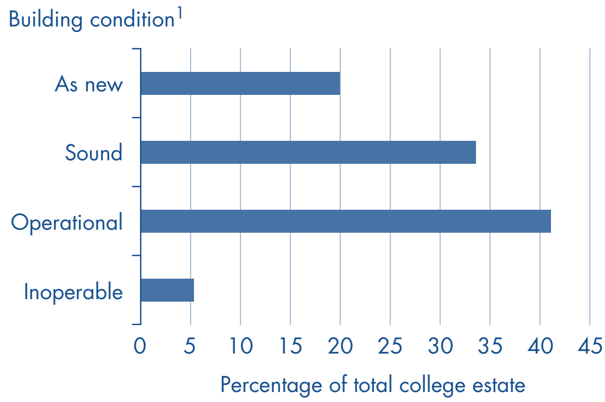
1.10 In managing the capital programme, the Learning and Skills Council's main roles are:

- setting the strategy for the programme and the rules which colleges must follow in order to gain approval for their projects;
- approving capital projects, and providing funding where there is a gap between the approved project cost and the amount of money a college can raise for the project;
- supporting colleges through the initiation, design and development of their project; and
- paying agreed grants to colleges in a timely fashion.

1.11 Although the Learning and Skills Council often encourages colleges to promote projects in support of its programme aims, priorities and targets, colleges initiate their own projects and make proposals to the Council for capital grant support. Colleges have a number of reasons for developing a project; our survey of colleges indicated that the most important reason was that existing buildings were unfit for purpose, and another reason commonly quoted was the need to improve their attractiveness to potential students **(Figure 4)**.

3 The condition of college buildings, 2006

Colleges assessed that almost half of the area of their estate was in no better condition than 'operational', meaning it needed replacing within three to five years.



Source: National Audit Office analysis of data supplied by 316 colleges to eMandate

NOTES

1 'As new' means space that was built or refurbished in the last 5 years.

'Sound' means space that is operationally safe with only minor deterioration.

'Operational' means space that needs major repair or replacement within 3 to 5 years.

'Inoperable' means space at serious risk of failure or major breakdown.

2 2006 was the first year when this condition data was available centrally for a substantial majority of colleges.

4 Main reasons for undertaking projects

Three-quarters of colleges undertook projects to replace unfit buildings.

	Most important reason	Applicable reason	Total responses
	(Percentage of colleges)		
To replace buildings unfit for purpose	48	28	76
To provide more places	15	36	51
To improve attractiveness to potential students	9	76	85
To respond to inspectors' comments on accommodation	3	45	48
For regulatory reasons – health and safety/Disability Discrimination Act	2	36	38
Following encouragement from the Learning and Skills Council	0	41	41

Source: National Audit Office survey of colleges

NOTE

Based on responses from 141 colleges which have received detailed approval from the Learning and Skills Council for a project.

4 Learning and Skills Council (2008), *Building Colleges for the Future: The Learning and Skills Council's National Capital Strategy for 2008-09 to 2010-11*. Part of the reduction achieved between 1993 and 2006 comes from a recategorisation of area that was not directly for further education use (such as student residences, operational farm buildings, centres exclusively for higher education, and out-reach centres that were licensed or rented on short term leases), which is not included in the 2006 area total.

1.12 The speed at which projects have been initiated and developed has been influenced by colleges' ambition and willingness to engage with the programme and the availability of funding. Only a small minority of colleges have so far chosen not to engage. There was a fast build up of interest in the early years of the programme and, by March 2004, 61 per cent of colleges had had detailed approval for at least one project. By March 2008, this had risen to 88 per cent. Around 30 colleges have however not yet had a project approved, either in detail or in principle. This includes three colleges where at least 50 per cent of their estate was classified as unsatisfactory or inoperable. Some colleges have been slow to engage, but are now generally developing projects where they are needed, for fear of being left behind by other providers.

1.13 Some colleges may have also been influenced to improve their infrastructure by their decision to provide higher education courses. The Higher Education Funding Council for England has provided some capital funding towards higher education within further education colleges (£42 million between April 2005 and March 2008 to colleges directly funded by the Funding Council and a further £32 million to universities for higher education provided by their partners). Otherwise, the Learning and Skills Council often gives financial support for facilities that are used at least in part for higher education courses (usually where higher education accounts for up to 20 per cent of the usage of the campus). Since early 2008, the Learning and Skills Council and the Funding Council have been discussing how to simplify cross-sector capital procedures and expect to consult providers on a way forward in the autumn of 2008.

1.14 Further education colleges in Scotland and Wales are also independent corporations which receive some financial support from central government for capital projects. Appendix 2 compares the key features of each country's approach to their capital programmes.

PART TWO

The sector's response to the need for renewal

2.1 As independent corporate bodies, colleges choose to participate in the Learning and Skills Council's capital programme by developing their own projects. This part of the report examines:

- whether the Learning and Skills Council co-ordinates college projects in a coherent programme to achieve outcomes related to their strategic objectives for the sector;
- whether effective procurement strategies and support arrangements are used to deliver the projects; and
- whether colleges are completing projects to cost and time.

The management of the capital programme

The national capital budget and procurement strategy

2.2 In designing the programme, the Department and the Council took account of the ability of many colleges to make a substantial financial contribution to their project:

- many colleges owned surplus land or buildings that could be sold for development, often in urban locations, and there was a need for reducing the overall size of the further education estate (paragraph 1.9);
- almost all colleges could take out secured loans (which are not counted as public borrowing) against their assets; and
- some colleges could use financial reserves that they had accumulated.

In addition, some colleges can obtain grants from Regional Development Agencies and other regeneration and heritage bodies where projects address regeneration aims.

2.3 There was therefore an opportunity for joint funding of renewal, with the colleges and the Learning and Skills Council able to achieve together what neither could have achieved on their own. The Council was also able to limit its risk exposure and maintain financial discipline, on the basis that the colleges would bear the risk of overruns occurring during the construction of their new facilities. **Figure 5** shows the growing programme of capital projects which has resulted, and to which both parties have contributed.

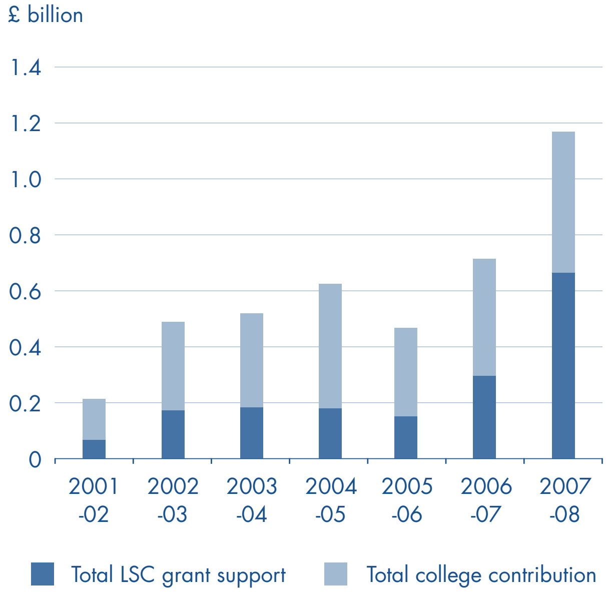
2.4 To take advantage of this opportunity, the Learning and Skills Council's budget for the further education capital programme has grown substantially: from £99 million in 2001-02 to £404 million in 2007-08, and is planned to increase to £610 million by 2010-11.[5] In recent years, projects have been fewer in number (for example, the Council approved 143 projects in 2003-04 and 60 in 2007-08) but greater in value (the average approved cost rose from £3.6 million in 2003-04 to £19.5 million in 2007-08). The range in project costs has also widened: the largest project in 2001-02 had an approved cost of £53 million (South East Essex College of Arts and Technology) and the largest in 2007-08 had an approved cost of £92 million (Hastings College of Arts and Technology). The increasing average cost is mainly due to the increased physical size of projects, enhancements in the quality of materials used, and rising prices in the construction industry. For the projects to remain affordable for colleges, the Council has contributed an increasing proportion of the total cost (Figure 5).

2.5 By March 2008, the Learning and Skills Council had agreed to provide grant funding for 41 per cent of the total cost of the projects it had approved. For projects with detailed approval from 2004-05 onwards, colleges are funding the balance of their project costs through external borrowing (24 per cent of the total cost), the proceeds

5 These budgets exclude capital budgets for school sixth forms and National Skills Academies (£179 million in 2007-08, for example) because these projects are outside the scope of this study.

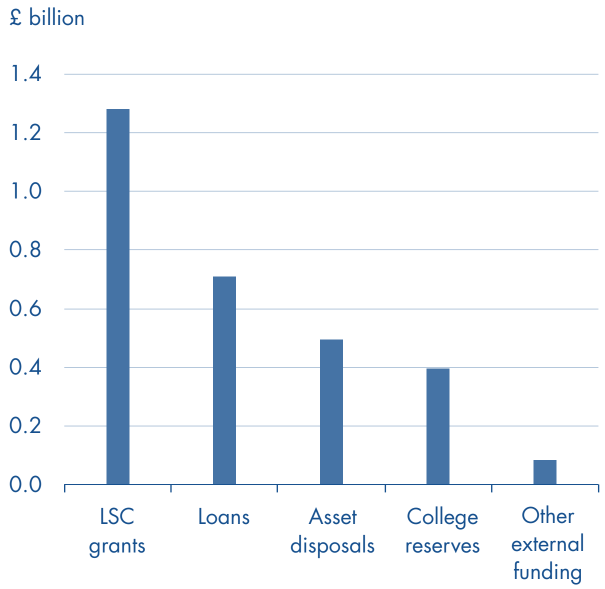
5 The funding of approved capital projects, 2001-02 to 2007-08

Between 2001-02 and 2007-08, projects with a total cost of £4.2 billion were approved and the Council's contribution to these was £1.7 billion.



Source: National Audit Office analysis of the Learning and Skills Council's project data

6 Sources of funding for capital projects given detailed approval, 2004-05 to 2007-08



Source: National Audit Office analysis of the Learning and Skills Council's project data

NOTE

Comprehensive data on sources of funding is available only from 2004-05.

of asset disposals (17 per cent), use of their reserves (13 per cent), and other external funding (3 per cent) such as grants from Regional Development Agencies **(Figure 6)**.[6]

Objectives and prioritisation

2.6 To renew the physical infrastructure efficiently and effectively, the Learning and Skills Council needs to focus its capital funds on projects which meet identified strategic priorities, and distribute those funds so as to achieve best coverage of needs across the further education estate.

2.7 In 2001, the Learning and Skills Council adopted its predecessor body's approach for improving efficiency by downsizing the estate, ensuring its fitness for purpose and improving accessibility for disabled people. The Council expected each project to be consistent with the college's own strategic plan and the plans of the relevant one of the 47 local Learning and Skills Councils, and to see evidence of consultation with local stakeholders such as local authorities and other providers. The Council intended to give priority to projects identified as necessary by area inspections or by strategic area reviews of local provision, but the further prioritisation of projects that met its projects criteria was not required because its national budget was sufficient to fund them all.

2.8 Early in the programme, the Learning and Skills Council's national capital team found that the Council's local structure of 47 areas made it difficult to prioritise capital projects nationally. The Council's decision to move to a regional structure from 2004 meant that it was more able to work with regionally based organisations and develop regional priorities for the Council's local teams to act on. By 2006, following further reorganisation, this had begun to impact on strategic thinking about property strategies, and the Council produced nine regional capital strategies that were agreed by the national capital committee in June 2006. This first round of strategies highlighted that some of the Council's regions took quite different approaches to encouraging colleges' proposals. For example, some regions stated that they would prioritise projects that accelerated the renewal of the estate most efficiently, whereas others developed more complex prioritisation matrices, scoring projects against regional and national objectives, their fit with the local strategic plan, how they met employment needs, and how they aligned with the Council's key principles. The Council prepared a second round of regional strategies in 2007, with a more consistent approach, which will be further updated in 2008.

6 The total grant funding of projects approved from 2004-05 onwards met 43 per cent of the total costs.

2.9 The 'bottom up' approach, combined with there being sufficient national funds to support all project proposals ready for implementation that have met the criteria, has contributed to the wide variations between the nine regions in the total capital grants provided **(Figure 7)**. Some other factors have also had an effect, such as differences in construction costs and the complexity and relative condition of the regional estates. The South East has had the most grant funding approved in absolute terms, and the North East has had the most grant funding after adjusting for the size of the regional estates.

2.10 In March 2008, the Learning and Skills Council published strategic objectives for the capital programme, with more focus on organisational structures, collaboration and provider quality:[7]

- securing the right organisational solution and provider network in each local area;
- ensuring that qualifying 14–19 capital projects are appropriately funded, and promoting collaboration between providers and partners to deliver the 14–19 curriculum;
- supporting vocationally excellent further education, voluntary sector and other qualifying providers that have been awarded the New Standard for employer responsiveness and vocational excellence;
- supporting sustainability and reducing the carbon footprint, and encouraging innovation in sustainable design and construction; and
- value for money as demonstrated by transparent, competitive procurement processes and compliance with the Council's cost measures.

Approval processes

2.11 We examined whether the Learning and Skills Council had rigorous processes for reviewing projects at key stages to assess whether they will contribute to its objectives, and deliver benefits and value for money. Its assessment process also needs to cover whether colleges have the right processes, structures and expertise to deliver the project as planned.

2.12 To gain approval from the Learning and Skills Council, projects must meet the Council's detailed criteria (Appendix 3), which are summarised as:

- the educational case for the project (which is developed in consultation with the Council's local teams, and other local stakeholders such as local authorities) must demonstrate that the project is required for meeting learner demand, and addressing the needs of particular types of learners;
- the property case must demonstrate that the project meets the property needs of the college, for example by materially improving the quality of buildings, and can be delivered within the Council's benchmark costs; and
- the economic appraisal and affordability analysis must demonstrate that the proposed option is justifiable in financial and economic terms and is affordable to the college.

2.13 The Learning and Skills Council has a precondition that colleges identify and adopt a clear project management and administration structure. It requires that colleges should appoint a senior manager, not

7 Funding approved for projects by region, 2001-2008

Region	Number of colleges (as at 2007-08)	Total grant (April 2001 to March 2008) £ million[1]	Grant/area £/square metre[2]
South East	63	306	247
West Midlands	49	260	266
North West	60	250	192
Yorkshire and the Humber	40	178	196
Greater London	53	165	154
North East	22	156	311
East Midlands	25	138	228
East of England	34	137	191
South West	32	119	147

Source: National Audit Office analysis of Learning and Skills Council data

NOTES

1 Grant figures are for all projects given detailed approval in the period.

2 Grants per square metre are based on the gross internal areas of the estate in each region in 2007-08.

7 Learning and Skills Council (2008), *National Capital Strategy for 2008-09 to 2010-11*.

necessarily with construction experience, to act as the client focus for a project. This manager should be supported by professional firms of project managers, cost consultants and designers, and should also have the support of appropriate internal resources. The Council does not specify that colleges should secure training in project sponsorship for the manager with day-to-day responsibility. The Council also requires evidence of governing body approval and oversight of the project. It expects governors to provide leadership as appropriate, without getting too involved in the detail. Governance is most commonly provided by a sub-committee of the governors, meeting regularly and taking reports from college managers with day-to-day client responsibility.

2.14 There is a scale of delegated authorities for approval, graded according to total project value and the proportion to be funded by the Learning and Skills Council. While projects costing up to £5 million may be approved by the Council's regional directors, the largest projects (over £30 million) are scrutinised by local area directors, regional staff and the regional board, and the national capital committee, before they then go to the national Council for approval. In our survey of colleges, 76 per cent of colleges were at least satisfied with the efficiency and effectiveness of the Council's approval process. In April 2006, KPMG recommended more delegation to the regions, to cope with the increased flow of applications coming up to national level as the size of projects increased. Implementation has for the most part been delayed pending the setting up of the Council's new regional councils.[8]

2.15 The Learning and Skills Council assesses project applications for evidence that colleges have sought to maximise value for money by competitively tendering projects and by taking appropriate advice on the form of contract. The Council uses criteria to judge the value for money of capital project proposals, including net present values, 'cost norms' and space utilisation. The Council normally expects the investment appraisal for the preferred option for a project to show a positive net present value. We found that the model it prescribed has tended to favour options and projects where the college has an asset to sell, or it has required colleges to increase their learner numbers to pay for the project. It did not recognise that buildings had to be replaced at the end of their useful life, when replacement buildings would not increase learner numbers but were essential to prevent the loss of learners. The Council has revised its investment appraisal methodology to take an incremental approach, looking at how the net present value of each option compares to a reference case. This will allow it to take a clearer view of the whole life costs of different options.

2.16 The Learning and Skills Council operates a three-stage feasibility and approval process for projects costing over £10 million: feasibility, approval in principle, and detailed approval. Projects of less than £10 million do not usually include an approval in principle stage.

- **Feasibility.** A college considers the educational and financial business case, identifies and evaluates options and consults with stakeholders. The Learning and Skills Council will contribute up to £100,000 towards a feasibility study. This stage enables colleges to agree project aims and a broad development strategy with Council officers.
- **Approval in principle.** A college prepares plans, including an outline proposal[9], for its chosen option, and submits an application to the Learning and Skills Council. The Council contributes up to £250,000 of the cost. This stage enables the Council to take a view on the proposal and the educational, property and financial cases and influence the project before a detailed design has been developed.
- **Detailed approval.** A college completes a detailed design, arranges funding, obtains tenders for the main contracts and then seeks the final approval of the Learning and Skills Council. The Council contributes to the costs in the same proportion to which it contributes to the approved project.

2.17 The Department does not require Gateway Reviews of college projects. The Office of Government Commerce Gateway™ process uses accredited practitioners from outside the programme or project to examine progress at key decision points and the likelihood of successful delivery. Gateway Reviews are complementary to internal processes, and provide independent assurance that projects can progress successfully to the next stage. The Council considers that its three stages of approval fulfil that function, especially approval in principle and detailed approval stages where the Council's professional education, finance and property staff scrutinise colleges' project proposals closely. However, as a part-funder of projects and with responsibility for the programme, the Council is not completely independent of projects. The Council has built the requirement for Gateway Reviews into its new consultancy framework.

8 To be set up under the Further Education and Training Act 2007. The Council advertised for recruits in March 2008.
9 This approximately equates to Royal Institute of British Architects (RIBA) Stage C, and includes a project brief, floor plans and elevations, cost estimate, and consideration of town planning issues.

Procurement strategy for individual projects (contract strategy and funding arrangements)

2.18 Procurement strategy is the combination of the contract strategy for a project and the arrangements for funding, and it can be key to the outcome of the project. The Learning and Skills Council has since 2001 had sufficient capital allocations to support a programme based on capital grants to colleges combined with colleges' own resources and their ability to increase their borrowings. The Council requires colleges to examine whether they could obtain better value for money through private finance or public-private partnerships (PFI/PPP). After examining the options, almost all colleges have chosen to proceed on a grant-funding basis, reflecting in many cases their ability to part-fund projects through asset disposals. From our case studies, we found that the scale of the projects was not sufficiently large to generate interest among private contractors in PFI/PPP deals.

2.19 With the assistance of their professional advisers, colleges must also choose their contract strategies. 'Traditional' contracting, where the design and construction are provided separately, should generally only be used where it can be clearly demonstrated that it provides better value for money. The Council expects colleges to use appropriate contract strategies, and usually promotes two-stage 'design and build'[10] as the preferred choice. This is in line with the Office of Government Commerce's guidance and gives a college more cost certainty so long as its building design is not changed at a late stage.[11] Our survey showed that colleges have used traditional contracting more often for small projects, and design and build for larger projects **(Figure 8)**. From our case studies, we found that there was scope for colleges to make more use of contract strategies that involve fully integrated project teams. The advantages of this approach are that it gives the contractor early involvement in design decisions that affect the practicalities of the construction and operation of buildings, and encourages joint commitment between professionals and building contractors to achieving best value. The Council does not, however, hold information on the extent of integration in project teams but will be collecting this as part of its new consultancy framework arrangements. A potential barrier to early involvement is that a college may feel uncertain about whether its project will go ahead.

2.20 In considering a capital funding application, the Learning and Skills Council now assesses how much of the cost the college can afford to finance from asset sales, loans and reserves. Until September 2003, the Council had continued the practice of its predecessor, the Further Education Funding Council, setting its normal contribution to any project at 35 per cent of the total cost, although if a college's proceeds from the sale of assets exceeded 65 per cent of the project costs, the Council's policy was to abate its grant by an amount equivalent to that excess. The Council intended that this approach would build on the strengths of the further education sector early in the programme by prioritising projects that colleges were willing and able to majority fund themselves. Between June 2001 and August 2003, 207 (74 per cent) of the 281 projects receiving detailed approval were funded at 35 per cent of the total cost. Of the remaining projects, 51 (18 per cent) were approved at less than 35 per cent grant and 23 (8 per cent) were approved at more than 35 per cent grant. By comparison, only 81 projects (51 per cent) out of 160 approved in the period September 2003 to March 2005 were funded at 35 per cent.

8 Contract strategies and project size

A third of the colleges in our survey had used traditional contracting for their projects, though most of the projects were relatively small.

	Project cost					
	£0-£5million	£5million – £10million	£10million – £20million	£20million – £30million	>£30million	Total
	%	%	%	%	%	%
Design and build	20	8	10	8	11	57
Traditional	21	5	4	2	1	33
Other	3	1	4	1	1	10
Total	44	14	18	11	13	100

Source: National Audit Office survey of colleges

10 Under two-stage tendering, the college appoints a main contractor on the basis of a first stage tender which determines the level of overhead and profit. The contractor then works with the project team (the college and its professional advisers) to develop the designs and establish detailed costings. The college can then enter into a fixed price contract, and in the case of a design and build strategy transfer the design team's contracts to the contractor.

11 Design and build is "using a single contractor to act as the sole point of responsibility …for the design, management and delivery of a construction project on time, within budget (taking account of whole life costs) and in accordance with a pre-defined output specification…." *Office of Government Commerce.*

2.21 The policy of normally funding projects at 35 per cent of cost had the effect of stretching grant funding across more colleges by holding down the average size of projects, stimulating increased capital improvement, but also preventing colleges lacking financial strength from undertaking larger projects. From September 2003, the Council started to assess funding against affordability criteria (Appendix 4), designed to provide sufficient funding to avoid risking colleges' financial health. This change increased the opportunities for colleges without surplus assets. The proportion of project costs funded by the Council started to increase; for projects given detailed approval in 2007-08 it was 56 per cent **(Figure 9)**.

2.22 Since 2006, the Learning and Skills Council has required colleges seeking funding for new projects to demonstrate that they have examined the scope for joint procurement with Building Schools for the Future. This programme, sponsored by the Department for Children, Schools and Families, aims to renew all the schools in England where there is need, in fifteen waves of development over 10 to 15 years that started in 2005-06, and using public-private partnership arrangements to deliver. So far there has been little co-ordination or joint initiation at the individual college or school project level, which in part is likely to reflect difficulties in adapting the Building Schools for the Future business and funding models to suit the joint procurement of college and school projects. The Council considers that local authorities' strategic leadership role for 14-19 education in both schools and colleges is now helping college and school developments to complement each other and the inclusion of particular local authorities in a Building Schools for the Future wave can be an incentive for colleges in those areas to bring forward complementary capital proposals.

Support for colleges

2.23 The Learning and Skills Council is responsible for the delivery of the capital programme but the delivery of projects lies with colleges. The Council cannot act for colleges, as they are independent corporate bodies. However, it needs to provide appropriate and adequate support (consistent with its statutory responsibilities), at a reasonable cost and of good quality, to colleges so that its programme objectives are met and projects delivered give good value for money. Such support should focus on the areas where it can add the most value, and be available when it is needed – and in particular for the larger projects. Of the 57 projects given detailed approval and costing over £20 million by March 2008, 33 were in colleges that had not started an earlier project since 2001.

9 Learning and Skills Council contributions to project costs, 2001-02 to 2007-08

The proportion of approved project costs that the Learning and Skills Council has funded has increased each year since 2004-05.

Source: National Audit Office analysis of the Learning and Skills Council's project data

NOTE

Figures are as at date of detailed approval; there is a time lag between the change in policy on the maximum contribution and its effect in the chart.

2.24 The Learning and Skills Council provides property-related support to the programme through its national infrastructure and property services team, comprising 22 staff including ten regional property advisers. This team is responsible for capital policy development in support of the Council's wider programme aims, administering the capital programme including payment of grants, giving guidance to colleges whilst respecting their independence, and helping colleges develop their capacity to act as intelligent clients of construction contractors. Regional property advisers provide such support, in particular to colleges that have little experience in capital projects, although their main role is helping colleges with the Council's project criteria and approval procedures. The regional property advisers are well regarded by college staff: 84 per cent of colleges in our survey rated them as useful or very useful. In April 2008 there were only nine of them (with one post vacant), however, resulting in their being thinly spread across the 130 or so projects that had been approved but not yet completed and many other projects that were at feasibility stage. The Council intends to recruit additional regional property advisors and other professional staff to support the growing programme.

2.25 The Learning and Skills Council has published guidance for colleges, the majority of which have found it useful: 74 per cent of colleges in our survey rated it as useful or very useful, while nine per cent found it to be of little use. The major part of the guidance relates to the Council's capital approval processes including investment appraisal, cost norms and space utilisation guides. The Council has also issued guidance on good design in further education and sustainability, and has launched and is further developing a website to provide guidance and support to colleges and their consultants in developing capital projects.[12]

2.26 Following a Competition Act investigation, the Office of Fair Trading recently reported that many firms in the construction sector in England may have engaged in bid rigging activities. It currently intends to publish its final conclusions in 2009.[13] Some of the sector's main contractors have been named, and the Learning and Skills Council has asked the Office of Fair Trading whether any further education contracts are involved. Our study did not look at this issue. The Learning and Skills Council has written to colleges on the implications of the Office of Fair Trading Investigation, referring them to a joint Office of Fair Trading/Office of Government Commerce guide for public sector procurers of construction, including guidance on mitigation of the risks of anti-competitive behaviour.[14]

2.27 Most colleges do not have in-house project management expertise and rely heavily on a consultant project manager. In April 2008, following a competition, the Learning and Skills Council introduced framework contracts for consultants covering design, project management, and cost management. Colleges are required to use the frameworks for projects costing more than £5 million. Framework contracts are intended to help colleges to identify suitable potential consultants, to access competitive prices, and to save time and procurement costs. They also provide colleges with access to expertise in Gateway Reviews. The Council is also considering setting up framework contracts for construction contractors for colleges. Frameworks are a good practice, although some colleges are unhappy that they are now barred from using firms outside the frameworks but which have given them good service in the past.

Continuous improvement in projects

2.28 At the beginning of the capital programme in 2001, the sector generally lacked experience of major capital projects, and the programme has evolved over time, increasing in complexity and size. We would therefore expect to see the sector move along a learning curve, taking opportunities to continuously improve. The Learning and Skills Council needs to keep processes and outcomes under regular review and adjustment; and colleges sharing lessons learnt must be a key lever for improvement.

2.29 The Learning and Skills Council has commissioned a number of reviews of the process and outcomes of the capital programme (Appendix 5). It set up and now sponsors and participates in the Royal Institute of British Architects' Learning and Skills Client Forum, together with architectural practices, contractors and other disciplines experienced in the further education sector, college representatives and Association of Colleges' officials. The group aims to promote communication and knowledge across the industry.

2.30 Learning and dissemination to colleges of lessons from projects could be more systematic. The Office of Government Commerce promotes two stages of post project evaluation: the post project review, which focuses on how well the project was managed and is carried out after construction is completed; and the post implementation review which focuses on whether the business benefits have been achieved and is carried out when a facility has been in use for at least

12 http://designguidance.lsc.gov.uk/
13 OFT Press Release 52/08, 17 April 2008, *OFT issues statement of objections against 112 construction companies*.
14 Office of Fair Trading/Office of Government Commerce (2006), *Making competition work for you*.

12 months. The Learning and Skills Council has always requested reviews of completed projects from colleges, which incorporated elements of post project and post implementation reviews. The Council has had limited success in collecting these, although the number of returns is improving and it has now received about 200. In 2006, the Council revised the format of reviews to include mostly quantitative information on costs, space utilisation and project timescales. The Council plans to carry out a programme-wide analysis of this data in summer 2008.

2.31 The Learning and Skills Council is keen to avoid adding to regulatory burdens on colleges and its preferred vehicle for dissemination of lessons is the publication of case studies. It envisages that these will be available to colleges from a number of sources, including the Association of Colleges' network on project management issues. The case study approach is likely however to rely on examples of good practice. For example the Council states that the case studies on its website will provide examples of successful college capital developments, and showcase the further education sector to the wider public. There is a risk that valuable lessons arising from less successful projects will be lost to the sector.

2.32 As the capital programme has progressed, colleges that have completed projects have built up considerable experience, and we noted from our case studies a few instances where college staff who had acted as project sponsors on a completed project had moved on to another college and project to use their acquired skills. But such experience has not been harnessed in any structured way by the sector. There has been significant informal sharing of lessons through conferences and networking across colleges, though a substantial minority have not taken advantage of this **(Figure 10)**. College staff we spoke to stressed the value of such contacts. However, staff also said that networking opportunities might not be enough to establish a real understanding of the commitment needed to progress a project, or to discuss some of the detailed issues.

Project outturns

2.33 For major projects, the future success of colleges is related to the outturns of these projects. Colleges therefore need to deliver their projects to cost budgets and timescales, planned with regard to reasonable quality and business continuity requirements. The Learning and Skills Council's information on project outturns is limited by the lack of a management information system, although it is planning to develop a system to replace its spreadsheet-based approach.

Capital and whole life costs

2.34 In preparing their initial designs for projects, colleges prepare budgets that are submitted to the Learning and Skills Council. The Council's professional property staff examine proposed budgets by reference to cost models for typical new build or refurbishment projects. The cost models give indicative costs for typical projects in different regions of England, and in the minority of cases where costs will vary from these norms owing to significant design differences or large abnormal costs, justification must be given by the college.

10 Support and guidance available to colleges

There is scope for more sharing of experience between colleges.

Source of support and guidance	Percentage of colleges that found this source useful or very useful[1]	Percentage of colleges that have not used this source[1]	Percentage of colleges that have shared their own experience this way[2]
Visits to other colleges	70	21	44
Networking with other colleges' staff	72	22	67
Conferences	53	32	17

Source: National Audit Office survey of colleges

NOTES

1 The residual colleges used the source but did not find it useful.

2 14 per cent of colleges said they had not shared their own good practice or advice.

2.35 In January 2006, Turner and Townsend reviewed the costs of projects based on detailed cost data for 28 new build colleges. They found that the average project cost (this is the 'net cost' and excludes VAT and land acquisition costs) was £1,625 per square metre, with costs ranging from £993 to £2,501 per square metre (all at 2005 prices).[15] They found that in most cases the higher the capital cost, the better the design quality and building performance. They concluded that these cost levels represented an acceptable minimum standard of quality, but that an increase to £1,781 was warranted to enable: compliance with good practice in the design of public buildings, improvement in the learner environment, satisfying more demanding statutory requirements, and encouraging a greater focus on sustainability. By comparison, the benchmark cost of a new school calculated on a similar basis and rebased to 2005 prices is around £2,000 per square metre.[16] College buildings are generally more complex than schools in that they need to accommodate a more diverse range of courses. The Learning and Skills Council accepted Turner and Townsend's recommendation and increased its cost allowances. The Council now expects average project costs to be between £2,275 and £2,707 per square metre (2007 prices) for a typical new build[17], depending on the region. Refurbishment projects are usually significantly cheaper.

2.36 The Learning and Skills Council intends that project budgets are finalised once total costs are almost ('95 per cent') certain. Before November 2006, projects were usually given detailed approval by the Council on the basis of pre-tender estimates, before colleges had received tenders for the main construction contracts. The Council told us that when colleges have found that tender costs exceed these estimates, they have frequently reduced the scope of their projects to stay within approved costs, reductions which might not have been properly discussed with the Council and may not have been good value for money. Now approval is usually given after tenders are received, which gives greater cost certainty at the point of approval.

2.37 Unforeseen problems and design changes can still lead to project cost increases unless colleges can make compensating savings. The Council does not maintain a central database that would show the extent of cost overruns, but in response to our survey 38 out of 141 colleges indicated actual or expected cost overruns averaging £0.9 million, compared with a total approved cost for those projects of £479 million – an average overspend of eight per cent where one occurs. Eleven colleges in our survey had a project that went over budget by 10 per cent or more of the approved cost, with the largest overspend being £7.3 million (10 per cent of the project cost).

2.38 When costs do start to overrun after the detailed approval stage, colleges have to bear the additional costs themselves, which they have often chosen to do using their reserves or by using deferred VAT[18] or by increasing their borrowings (in consultation with the Learning and Skills Council). However, colleges often do have to compromise the quality of their project: of the 38 colleges in our survey that reported a cost overrun, 12 de-scoped their project, four changed the design quality, and three reduced the size of the building.

2.39 Construction project decisions should be based on the optimum combination of whole life costs and quality. Whole life cost is important because the running and maintenance costs of a building over its useful life greatly exceed the construction cost. It is difficult however to produce reliable forecasts of the running costs of new buildings at the design stage. Until April 2008, the Learning and Skills Council had neither expected nor advised colleges to use a whole life cost approach to deciding on college designs, although the Council's review of colleges' financial forecasts and option appraisals included an assessment of ongoing property costs. Colleges assessed their main property strategy options using a net present value calculation over 20 years, but the whole life costs of buildings were not included.

2.40 In our ten case studies, colleges' design decisions tended to focus more on the affordability of construction costs, and there was less appreciation of the whole life cost of the buildings. Our survey found that colleges' estimates of running and maintenance costs of new buildings were generally not reliable, and they often underestimated the running costs **(Figure 11)**. Following a two year trial, in 2006 the Learning and Skills Council commissioned an estates database, eMandate. All colleges are expected to provide data on the running costs of their buildings, and it is a pre-requisite of receiving capital grant funding. The database should become an important source for helping colleges to become better informed on whole life costs when making capital expenditure decisions.

Delivery of projects to time

2.41 The Learning and Skills Council typically expects large college projects to take three years and ten months from the start of the feasibility stage to the completion of construction **(Figure 12)**.

15 Turner and Townsend explained that the wide range of costs was due to the inclusion in their sample of a wide range of accommodation types, to illustrate the nature of the further education estate.

16 £1,080 'new build base cost' in 2003 plus benchmark allocations (site costs; fees; information and communication technology; and fixtures, fittings and equipment) and uprated by construction cost inflation to 2005.

17 As at September 2007, and excluding land acquisition and VAT.

18 The 'Lennartz mechanism', created by a ruling by the European Court of Justice in 1991, has been used by some colleges to recover VAT they had paid at the time of construction and then to repay it over a longer period.

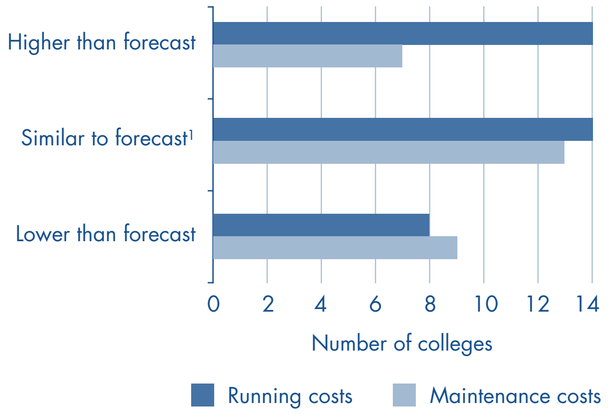
2.42 The time taken to progress a project through the Learning and Skills Council's approval processes and begin construction depends largely on the scale of the project and the extent to which colleges can provide comprehensive and timely information in support of their applications. The time between completing feasibility work and receiving detailed approval from the Council can vary from a few months to over two years, and smaller projects are more likely to progress in less than a year while large projects (over £20 million) commonly take over two years to reach Council approval **(Figure 13 overleaf)**. In our survey, the average time from completion of feasibility studies to gaining approval in principle was 10 months, and the average time from approval in principle to gaining detailed approval was 8½ months. With the Council now requiring tender costs to be submitted with the application it takes longer to progress to detailed approval but colleges are more ready to start construction.

2.43 Fifty-three per cent of colleges in our survey experienced delays in the start of construction compared to their original plans. These delays averaged seven months, and ranged from one month to two years. There are a variety of reasons for increases in the time taken to obtain Learning and Skills Council approval for their projects. Most commonly, delays in the pre-construction phase were caused by local authority planning issues, design changes, or delays in getting approval from the Council (which may be a result of insufficient or inadequate documentation being submitted) **(Figure 14 overleaf)**. Delays can have serious consequences for colleges, including increased project costs and disruption to college business such as the recruitment of new learners. They can also cause knock-on delays in the anticipated project completion date. For major projects, colleges usually aim to complete and occupy new buildings during the summer so that the new academic year starts in the new building. Any lengthy delays in the approval process can delay a college's practical completion date by an entire year as they wait for the next summer holiday to complete. There are advantages to completing work earlier in the year: in particular, having new buildings available for viewing by potential learners is likely to help in recruitment for courses that start in the autumn. Some colleges have successfully opened new premises at the end of the Christmas or Easter holidays.

11 The running and maintenance costs of new colleges compared with forecasts

Colleges find it difficult to forecast the initial running costs and maintenance costs of their renewed buildings.

Actual first year running costs compared with forecast

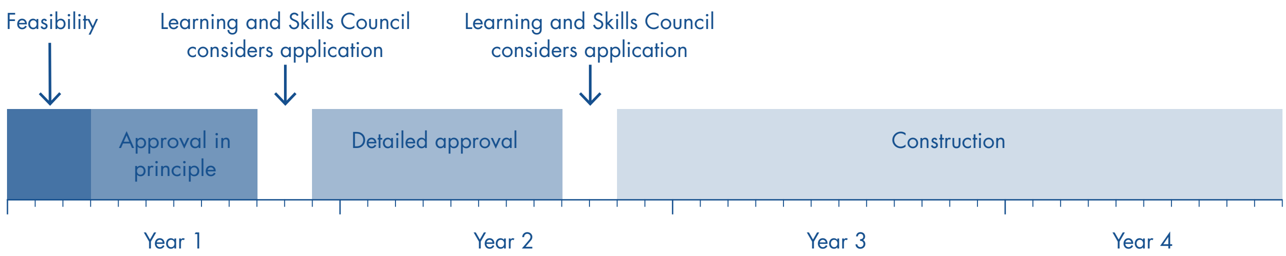


Source: National Audit Office survey of colleges

NOTE

1 'Similar to forecast' is defined as actual costs being within 10 per cent of the forecast.

12 The typical timescale of a large capital project



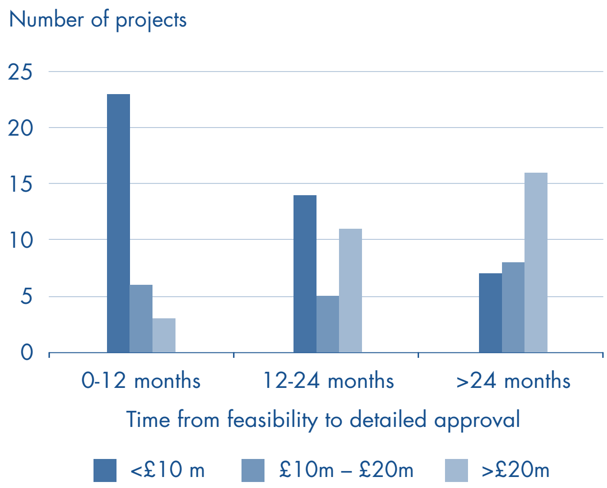
Source: National Audit Office based on the Learning and Skills Council's cost model

NOTE

Projects of less than £10 million do not usually require an approval in principle stage.

13 The time taken to get from feasibility to detailed approval

Most large projects take over two years to get from feasibility study to detailed approval by the Learning and Skills Council, while smaller projects are usually approved more quickly.

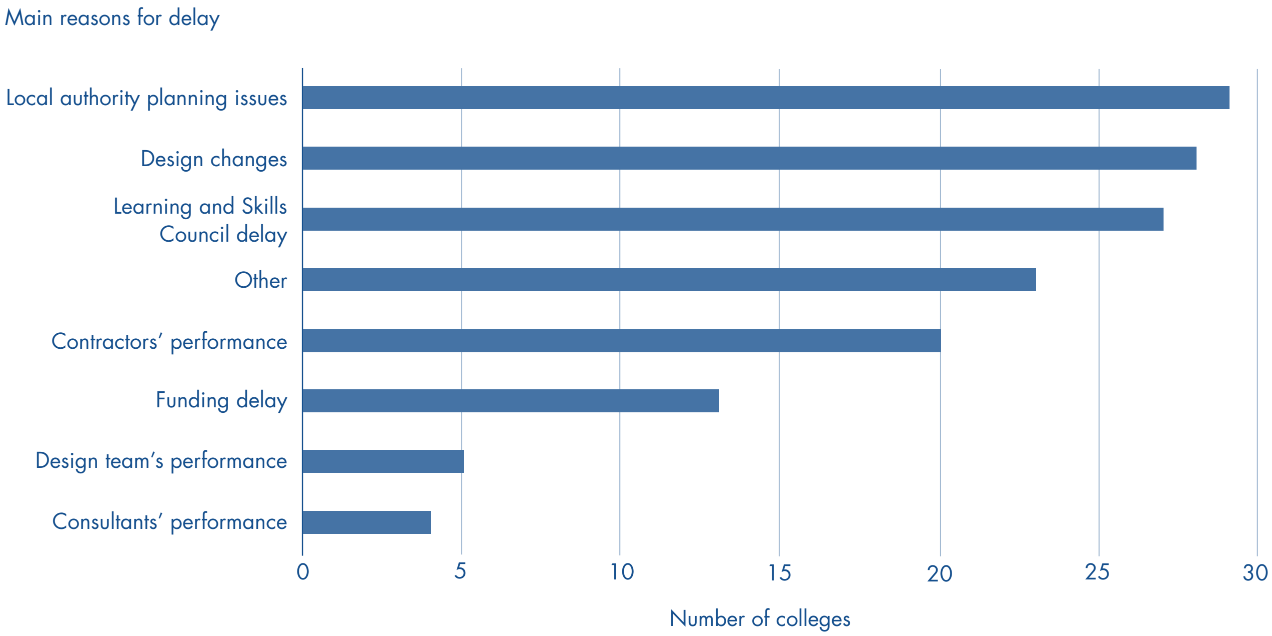


Source: National Audit Office survey of colleges

2.44 Fifty-seven colleges in our survey (40 per cent) experienced delays during the construction phase of their projects, the average length of which was around four months. The most common causes of delays at the 57 colleges were site difficulties (32 per cent) and contractor performance (30 per cent). While colleges can manage these problems to an extent, there are other causes of delays which can be more directly under the control of a college. Eighteen per cent of colleges with delays said that changes to the design had caused them. Some changes can become necessary during a project, for example the balance of courses a college offers may change and more of a particular type of space may be needed. However some colleges we visited described occasions when late changes to designs, which can cost both time and money, could have been avoided by more careful planning in the pre-project phase, including greater consultation with the users of the building.

14 The reasons for delays in getting detailed approval for projects

Colleges reported a wide variety of reasons for delays in getting detailed approval.



Source: National Audit Office survey of colleges

PART THREE

The outcomes of the capital programme

3.1 To assess the relative success of the programme and whether it is delivering value for money we have evaluated:

- the progress made by the sector in renewing the further education estate;
- the quality and environmental sustainability of the renewed estate;
- the impact of renewed colleges on learner numbers and experience; and
- changes in the financial health of the sector.

Progress in renewing the further education estate

3.2 Around half of the further education estate had been renewed by April 2008, and the Learning and Skills Council estimates that the remainder of the work necessary to substantially renew the entire sector should be completed by 2016.[19] The remaining projects will be generally larger and more challenging that those that preceded them. This is clear from the increasing size of project approvals: while 25 projects with Council-approved costs of over £20 million had been completed by the end of March 2008 **(Figure 15 overleaf)**, a further 32 were under construction and 47 had been given approval in principle.

3.3 Our assessment of progress in renewing the estate, based on current project costs and grant levels, indicates that achieving the target will be challenging. Assuming the national capital budget is maintained until 2016, to replace the remaining estate with new buildings that conform to the existing cost norms (paragraph 2.35), the Learning and Skills Council is likely to need colleges to provide around half of the funding (which is consistent with estimates prepared separately for the Council). By contrast, the Council support rate for projects approved in principle (i.e. projects that will cost over £10 million) in 2007-08 was 74 per cent. The Council, in consultation with the Department, is considering what changes and possible project prioritisation it will introduce during 2008-09, to make completion of the programme more affordable within the current national budget levels. Colleges may need to find efficiencies, for example through procurement strategies that group projects or by spreading the capital cost over a longer period.

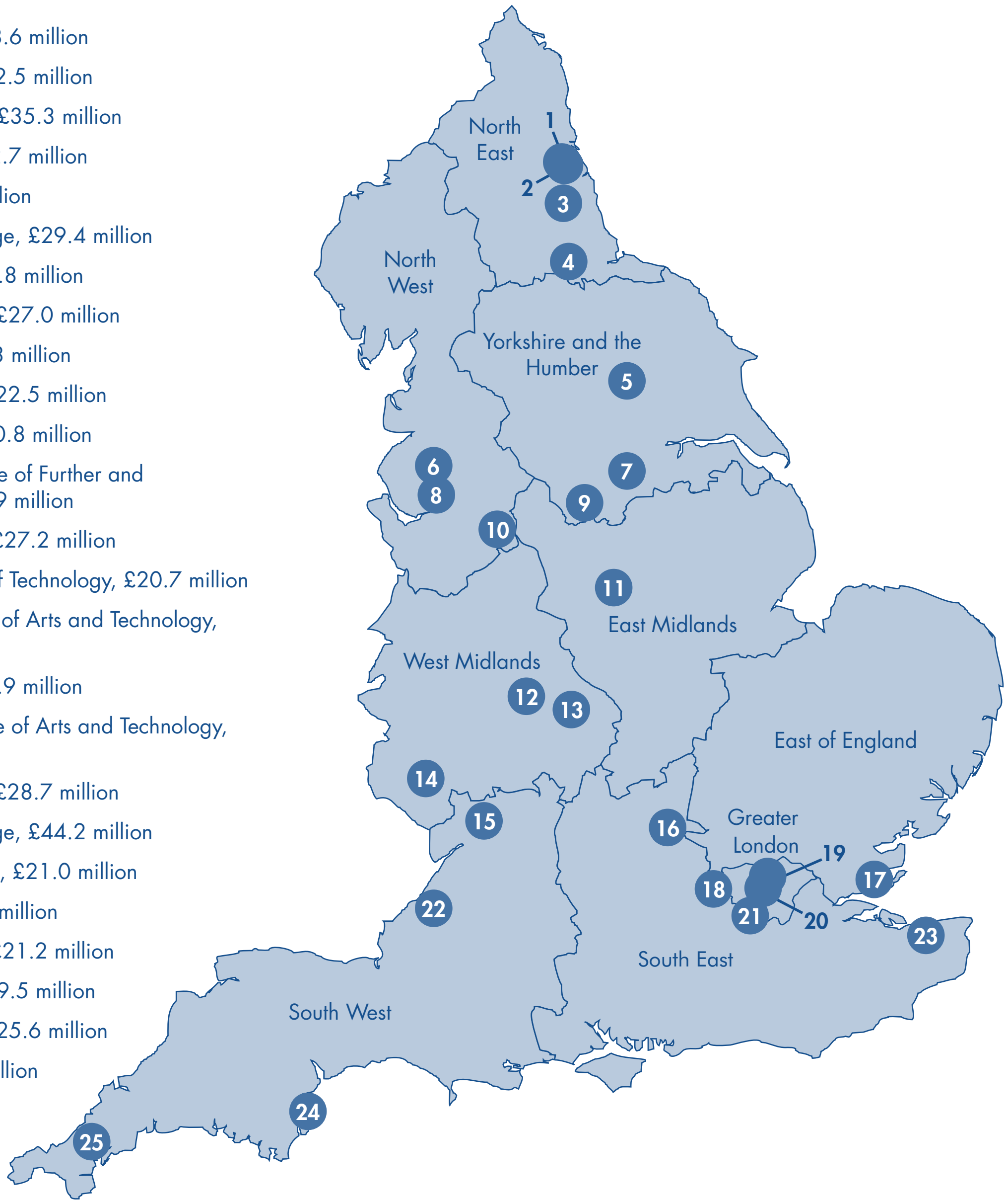
3.4 From its assessment of the work completed by each college and their approved projects, the Learning and Skills Council has found that there are wide variations across the nine regions in their progress in renewing the further education estate **(Figure 16 on page 27)**. As at May 2007, only 32 per cent of the area of the Greater London college estate had been renewed, compared with 63 per cent for the South West. The condition of the estate varied widely from region to region when the current programme arrangements began in 2001, which has contributed to the variation in their rates of progress made to date.

19 By 2014 approximately 90 per cent of the estate should have been renewed. The Learning and Skills Council anticipates that there will then be a rolling programme of investment renewing a fixed percentage of the estate each year, which would effectively mean 100 per cent renewal is achieved by 2016.

15 The location of major projects completed by April 2008

Twenty-five colleges have had projects approved by the Learning and Skills Council that were expected to cost at least £20 million and be completed by April 2008.

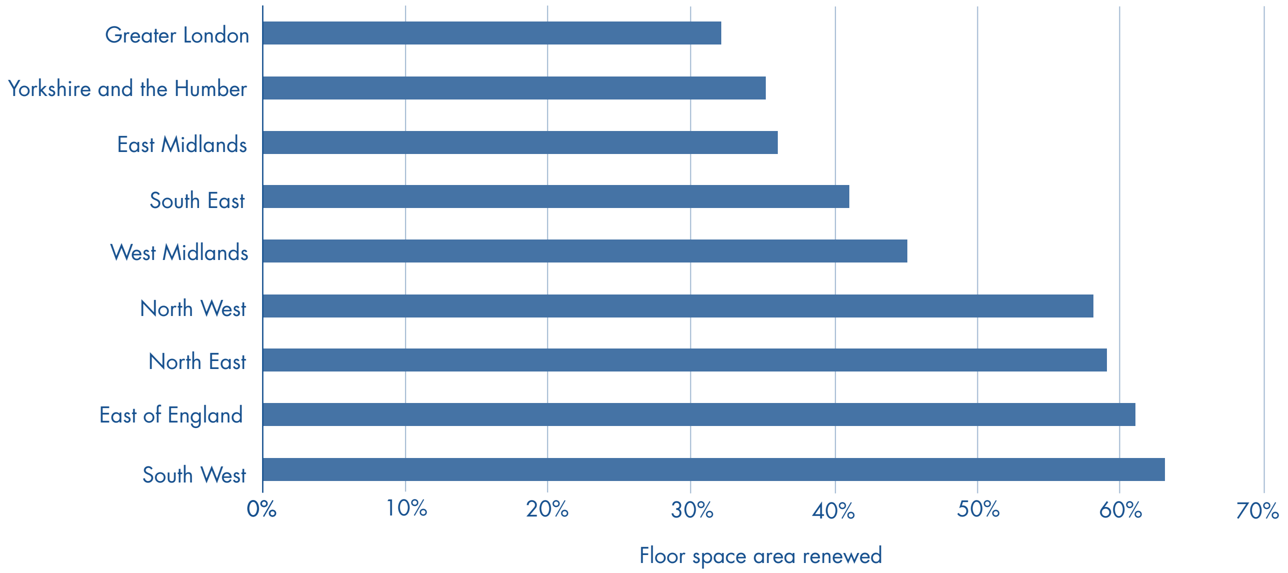
1 Newcastle College, £28.6 million
2 Gateshead College, £32.5 million
3 New College, Durham, £35.3 million
4 Darlington College, £32.7 million
5 York College, £60.5 million
6 Wigan and Leigh College, £29.4 million
7 Doncaster College, £60.8 million
8 Warrington Collegiate, £27.0 million
9 Sheffield College, £27.3 million
10 Macclesfield College, £22.5 million
11 Bilborough College, £20.8 million
12 Matthew Boulton College of Further and Higher Education, £37.9 million
13 City College Coventry, £27.2 million
14 Herefordshire College of Technology, £20.7 million
15 Gloucestershire College of Arts and Technology, £32.8 million
16 Aylesbury College, £29.9 million
17 South East Essex College of Arts and Technology, £53.0 million
18 East Berkshire College, £28.7 million
19 City and Islington College, £44.2 million
20 The City Literary Institute, £21.0 million
21 Merton College, £28.8 million
22 City of Bristol College, £21.2 million
23 Canterbury College, £29.5 million
24 South Devon College, £25.6 million
25 Truro College, £21.1 million



Source: National Audit Office analysis of the Learning and Skills Council's project data

NOTES
1 Project costs are as at detailed approval by the Learning and Skills Council.
2 The map also shows England divided into the Learning and Skills Council's nine regions.

16 Progress in renewing the estate by region, May 2007



Source: Learning and Skills Council

Quality of renewed colleges

3.5 The Learning and Skills Council intends that capital projects should result in modern, fit-for-purpose learning environments.[20] It encourages good design quality by publishing guidance, providing advice directly to colleges and by assessing their funding applications. Almost all colleges in our survey considered that their new buildings were good or excellent quality, and better than the ones they had replaced **(Figure 17 overleaf)**. Managers, staff and learners at colleges that we visited were generally pleased with their new buildings, which they considered were high quality learning environments. Some colleges highlighted a positive impact on staff morale, and some of the common strengths and areas for improvement at our case studies are highlighted in **Figure 18 overleaf**. Staff and learners were usually consulted on the designs, and involved in some of the design decisions. The 2006 report[21] by Turner and Townsend found that new buildings had often been very successful and that the quality of the buildings represented good value for the capital spending.

Environmental sustainability of renewed colleges

3.6 While many renewed colleges are an improvement on what they replaced and are better at meeting users' needs and expectations, they have not often performed well judged against environmental sustainability criteria. This is mostly applicable to colleges renewed early in the programme, before environmental sustainability became an issue of high concern. The Learning and Skills Council has, more recently, taken some steps towards addressing these weaknesses through increased funding.

- In response to the Turner and Townsend report, the Council in 2006 introduced an incentive to colleges to design for sustainability. It revised its project funding so that colleges could claim additional capital costs of up to 10 per cent to pay for environmental sustainability features that exceeded those required by the building regulations.
- In October 2007, the Council incorporated the 10 per cent allowance into new cost norms (paragraph 2.35), which further raised the cost allowances, design and specification of the materials it expected to be used in college projects.

20 Learning and Skills Council (2007), *Building for skills: A prospectus for the LSC's capital programme*.
21 Turner and Townsend (2006), *Review of the relationship between building design, cost and quality in the further education sector*.

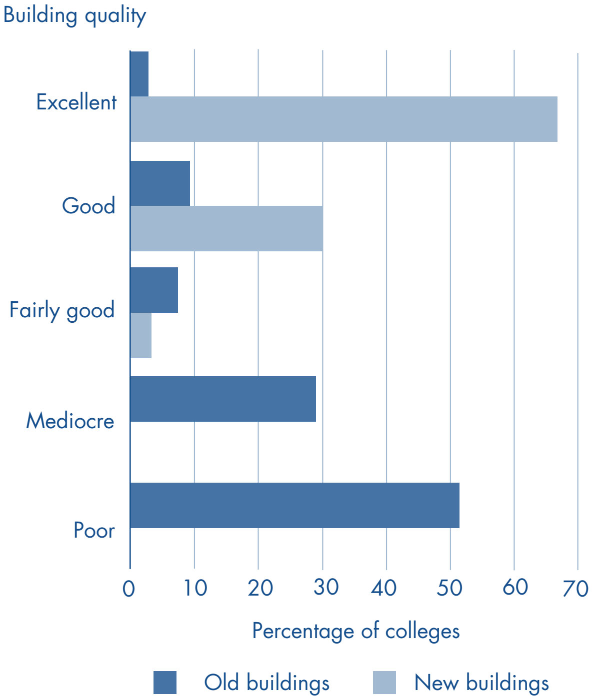
- In 2007, the Council introduced a grant scheme for colleges to implement projects that reduce the energy consumption and carbon emissions of their existing estate. This was in response to the results of the annual eMandate exercise, which showed that the sector's energy consumption per square metre increased by 3.9 per cent between 2004-05 and 2005-06 and that the best performing colleges use over 30 per cent less energy per square metre than the worst performers. The grant scheme has generated around 1,250 separate applications for support, with a combined value of over £22 million, and the Council estimates that they will achieve energy cost savings of around £6.4 million a year. The Council expects to announce a new environmental grant scheme in summer 2008.

3.7 The environmental performance of public buildings can be assessed and given an overall score using the Building Research Establishment Environmental Assessment Measure (BREEAM).

- Since 2002, Government departments have been required to conduct a BREEAM assessment (or equivalent) on all construction and refurbishment projects. Since 2003, new buildings have been required to achieve an 'excellent' rating and refurbishments should be 'very good'. However, a recent National Audit Office report[22] on government buildings found that less than half of building projects underway in 2005-06 had or planned to have BREEAM assessments and less than half of those assessed actually achieved the required ratings.

17 The quality of new and old buildings

The capital programme is generally resulting in 'mediocre' and 'poor' quality buildings being replaced by, or turned into, 'excellent' and 'good' quality buildings.



Source: National Audit Office survey of colleges

NOTE

Some projects consist of an extension or addition to the existing estate, meaning both old and new buildings could be considered good or excellent.

18 Common strengths and areas for improvement in new college buildings

Areas of strength

New buildings have impressive appearances that are welcoming, and make users feel proud of their college.

Buildings are designed to allow users to feel secure. There is good access control, visibility and monitoring of the behaviour of users.

More efficient design of learning spaces (often in fewer buildings) can enable a higher utilisation rate of a reduced floor space.

Improved access for learners and staff to modern Information and Communications Technology.

Modern facilities and equipment (sometimes supplied by employers) are provided for vocational courses.

More generous and clearly signposted circulation space, together with appropriate facilities for people with disabilities, makes it easier for all users to move around the buildings. More buildings include an atrium.

Areas for improvement

Although there has been good practice at some colleges, they have not generally been at the forefront of environmentally sustainable building.

At some colleges, poor ventilation in places has affected air quality and there can be a problem with keeping temperatures reasonable in periods of hot weather.

Social spaces for learners are sometimes allocated relatively little area, and sometimes with little or no seating.

Some colleges had difficulty in choosing the right size spaces for learning (which were often too small), although improved room booking arrangements will help.

Source: National Audit Office case study visits

22 National Audit Office (2007), HC 324 / 2006-07, *Building for the future: Sustainable construction and refurbishment on the government estate.*

- Since 2005, the Department for Children, Schools and Families has required all school construction to be assessed using BREEAM, and that all new schools achieve at least a 'very good' rating.

3.8 The Learning and Skills Council in 2007 announced that all new college projects would in future be designed and built to meet the criteria to achieve an 'excellent' rating. Our survey of colleges showed that only 9 per cent of colleges with recently completed buildings had obtained a BREEAM rating for their new or refurbished building. The low usage of BREEAM is probably also because the Council did not require an assessment prior to 2007 and there was no specific BREEAM assessment tool for colleges (which made assessment more expensive for colleges). The Council commissioned the Building Research Establishment to develop a BREEAM tool specifically for colleges, which became available in autumn 2007. The Council currently requires colleges to design and specify their new buildings to achieve at least a 'very good' rating and to aspire to be 'excellent'. Later in 2008, the Council will require that all new buildings achieve an 'excellent' rating.

3.9 There is a national target for the central government office estate to be 'carbon neutral'[23] by 2012. The Department for Children, Schools and Families' target is that all new schools built from 2007 onwards should be 'low carbon', and it is considering whether they should be carbon neutral by 2016. The Learning and Skills Council and the Department have set up a task force to advise on how all new college buildings can be 'zero carbon' by 2016, a target it announced in March 2008. The task force will report on the trajectory for colleges to reduce their carbon emissions from now until 2016. In the meantime, new buildings can be made more environmentally sustainable by applying the Office of Government Commerce's 'Quick Wins', which is a set of design features and specifications (such as energy efficient electrical equipment) that represent value for money. Although it has published the Quick Wins on its website, the Council could do more to promote their use by colleges for example in its guidance.

Impact of renewed colleges on learner numbers

3.10 Colleges most commonly renew their buildings because they want or need to improve the quality of their provision. From our survey, 47 per cent of colleges considered that their main reason for the project was that the original buildings were not fit for purpose, while other colleges needed more places for learners or to improve their attractiveness to potential learners.

3.11 The Learning and Skills Council commissioned Frontier Economics to investigate the impact of capital expenditure on college outcomes.[24] Frontier Economics examined cost, learner participation and attainment data between 1999-00 and 2004-05 in the first renewed colleges. It found that capital projects costing more than £1.5 million are associated with positive changes in participation, with every £1 million over the £1.5 million threshold increasing participation by 92 learners (per year) on average compared with similar colleges without capital projects. However, Frontier Economics' work was based on an analysis of a sample of early projects, the largest of which cost only £13 million. Its findings may not therefore be replicated on the same scale for the larger projects that have since become more common. Taking this work forward, Frontier Economics will update its analysis by collecting and using more finely grained data and by detailed examination of case studies.

3.12 In applying for funding, colleges are required by the Learning and Skills Council to forecast their expected numbers of learners in the years following project completion. However, the Council does not collate these forecasts centrally. Our analysis of actual learner numbers in the first major projects completed showed that colleges, on average, tended to grow slightly after completion of their project, whether or not they were growing or declining before the project **(Figure 19 overleaf)**.

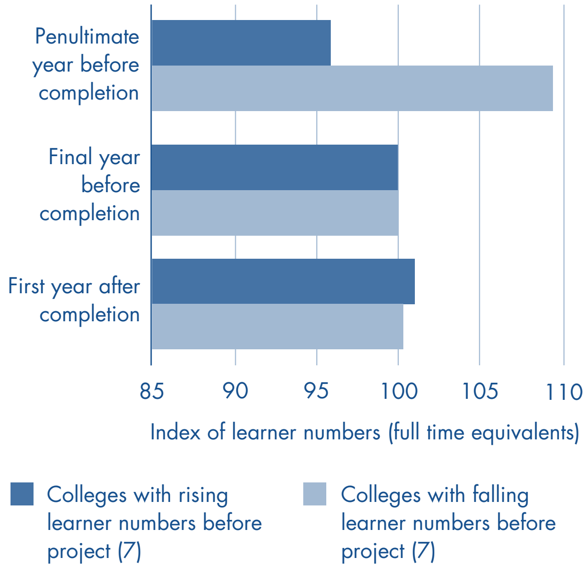
3.13 All colleges that we visited considered that their renewed facilities helped them to market their courses to potential learners. Many considered that the improvements had heightened and improved the profile of the college within the community, attracting interest from learners and employers who might not previously have considered the college as a provider. Learners that we met often mentioned that the physical appearance and facilities were a factor in their decision to enrol. Over half of colleges in our survey (56 per cent) considered that their project had delivered all of the expected benefits and another 39 per cent considered that most of the expected benefits had been achieved. The Learning and Skills Council conducts the National Learner Satisfaction Survey, but the Survey does not include questions relating to the quality of college buildings and how their renewal has influenced the decisions of learners.

23 For an organisation to be carbon neutral it must have zero net carbon dioxide emissions, which is achieved through a combination of reducing carbon emissions, using renewable energy and offsetting the remaining balance of emissions.

24 Frontier Economics (2007), *Evaluation of the impact of capital investment on colleges.*

19 Learner participation in colleges completing a major project

On average, colleges that were growing prior to the completion of their project, and those that were declining, grew slightly in their first year after completion.



Source: National Audit Office analysis of the Learning and Skills Council's data on projects and learner numbers

NOTE

This analysis is based on the simple average 'full time equivalent' learners of the 14 colleges that had completed a project costing more that £20 million by the 2006-07 academic year. The final year before project completion was indexed at 100.

3.14 Learner numbers in the sector have remained fairly steady in recent years and are forecast by the Learning and Skills Council to increase slightly from 2006-07 to 2010-11, implying that renewed colleges that have increased their learner numbers are likely to have displaced at least some of those learners from colleges or other providers such as school sixth forms. However, producing reliable statistical analysis of learner displacement is not possible with existing data.

3.15 A major project has the potential to be disruptive to the ongoing business of a college as it continues to provide a full range of services to learners. Colleges often have to use temporary accommodation and run services in close proximity to construction work, and their management teams and other staff have additional responsibilities relating to the project. The colleges that we visited had generally managed to maintain standards of provision in often difficult circumstances. The majority of colleges in our survey considered that their project had little or no impact on the continuity of the college's existing business (66 per cent) or on the learning experience of existing students (74 per cent). However, seven colleges (5 per cent) reported that they had suffered 'substantial' impact on either or both of these areas.

The indebtedness of the sector

3.16 The capital programme is changing the financial position of the sector. Colleges commit their reserves and dispose of surplus assets, as well as borrowing up to a sum equivalent to 40 per cent of their annual income in the third year after completion of a project. The Learning and Skills Council expects a college that is financially strong to borrow more than a college with weaker finances, and it assumes that the college can reach a strong financial position three years after the completion of its project.

3.17 The Learning and Skills Council reviews the financial health of the college sector after analysing colleges' annual accounts, using three financial health groups (A being strongest, B, and C being weakest and dependent or at risk of becoming dependent upon the goodwill of others – see Appendix 4). Although there was little change in the distribution of colleges into these groups in the four years to 2005-06, the number of colleges in Group C increased by 21 in 2006-07 (from 68 to 89 colleges). The Council is currently revising its financial health assessments, as part of the new 'Framework for Excellence' mechanism for performance management and quality improvement.

3.18 We assessed the impact of the programme so far on the financial position of the sector by reference to two benchmarks: the long term indebtedness[25] of the sector, and its interest payments. Loans and interest affect the operating position and liquidity of colleges, and hence their financial position.

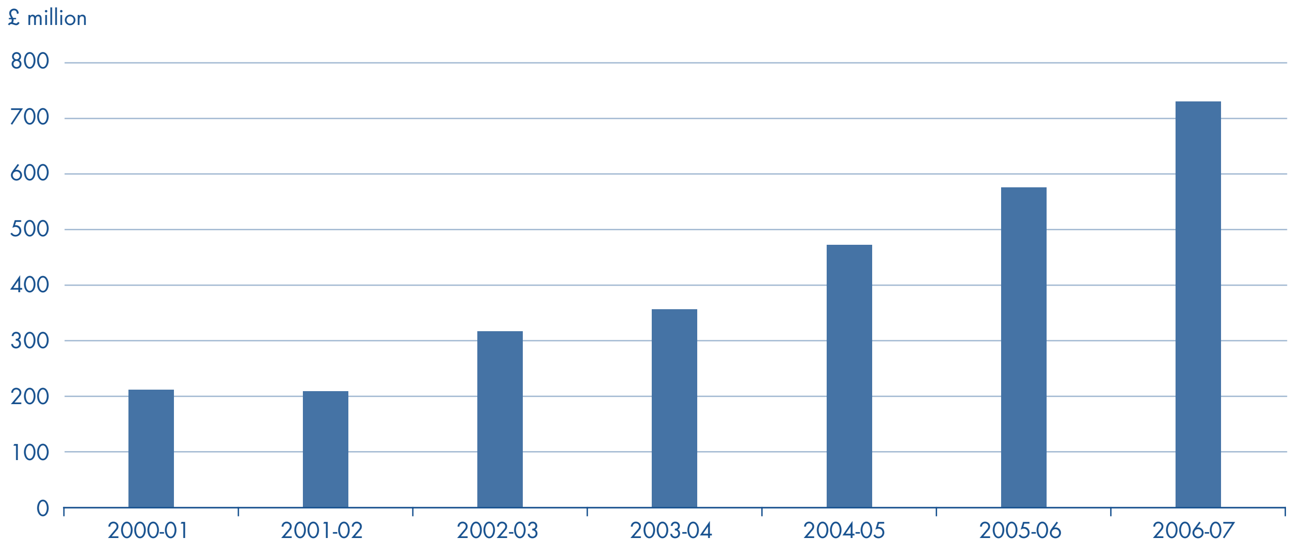
25 By 'long term indebtedness' we mean external borrowings that are due for repayment in more than one year's time.

- The long term indebtedness of the sector has increased substantially since 2001-02, to £731 million by the end of the 2006-07 academic year **(Figure 20)**. At that time 19 colleges had long term borrowings of more than 40 per cent of their income[26] and the sector's overall borrowings had increased to 12 per cent of income, from 6 per cent in 2001-02. Projects subsequently approved in 2007-08 included expected borrowing of £483 million, so the indebtedness of the sector will continue to grow rapidly. By comparison, the higher education sector had long term borrowings at the end of 2006-07 that were equivalent to 19 per cent of their income.
- Interest payments have also increased substantially. In 2006-07, colleges had loan interest payable of £58 million (up from £18 million in 2000-01), equivalent to around one per cent of their income in 2006-07. It compares with £171 million spent on building maintenance and £117 million on marketing. Most of the colleges we visited had fixed the interest rates for their loans for long periods so that their effects on cash flow are known and can be managed.

3.19 Whilst colleges can generally afford to service the loans they take out, they are vulnerable to changes in their income. The sector is experiencing change, in particular with the realignment of public funding from short courses – that the Department considers to be without progression or of low quality – towards basic literacy and numeracy and full qualifications. The substantial increase in funding through demand-led routes such as Train to Gain will maintain a stable number of adult learners. Colleges will increasingly be in direct competition with other colleges and private training providers for these learners, reflecting Government policy to put the purchasing power in the hands of employers and learners. Many colleges are also facing increasing competition for students from schools and academies with sixth forms (both of which do not need to borrow to finance capital works). In the context of a changing and increasingly competitive sector, some college finance directors we spoke to are concerned about colleges' ability to meet loan and interest repayments in the long term. They considered that the ten year financial forecasts, on which the Learning and Skills Council assesses a college's ability to repay loans, may not be reliable. Smaller, less diverse colleges, that are potentially less able to cope with large changes in their funding, could be especially at risk if they have taken out substantial borrowings to finance a major development.

20 College indebtedness, 2000-01 to 2006-07

Colleges' long term loans have risen during the programme to £731 million in 2006-07.



Source: National Audit Office analysis of the Learning and Skills Council's college financial records

NOTE

This figure does not include colleges' overdrafts and borrowings due for repayment within one year.

26 The Council acknowledges that a college's borrowing may temporarily exceed 40 per cent as a result of short term borrowing during the period of a major build. Including short term borrowing raises to 25 the number of colleges with total borrowings exceeding 40 per cent of their income.

APPENDIX ONE

Study methodology

1 This report is based on:

- a survey of further education colleges to gather both quantitative and qualitative evidence on their involvement with the capital programme;
- case studies of 10 colleges that are undertaking or that have recently completed projects together with review of the Learning and Skills Council's documentation relating to those colleges;
- interviews with staff at the Department, the Learning and Skills Council and other key stakeholders;
- data analysis using project data, estates data and college financial and learner returns;
- consultation with a panel of experts;
- a workshop with a group of college finance directors; and
- research review.

College survey

2 We undertook a census via e-mail of all colleges irrespective of the level of their involvement with the capital programme. Colleges were asked to complete one of two questionnaires, depending on whether or not the college had either received detailed approval or completed a capital project since 2002 (and their answers related to their most recent project). The census allowed us to gather both quantitative and qualitative information on a range of projects already undertaken as well as details of future projects and the reasons for colleges' involvement, or lack of engagement, in the programme. This data was then used alongside project data as part of our analysis.

3 We consulted with stakeholders and piloted the questionnaire with a college, the Association of Colleges and the Learning and Skills Council. The census was conducted from December 2007 to February 2008 and from a population of 376 colleges, we received 239 responses, 141 from colleges that had received detailed approval or beyond and 99 from colleges that had yet to receive detailed approval for a project. This represented a 64 per cent response rate overall. To guard against the risk of opinion bias, where possible we cross-checked survey evidence with evidence from other sources.

College case studies

4 We visited 10 colleges that have completed capital projects since 2005 or that have a project currently in progress. Colleges were selected to ensure a range of college sizes and types, geographical locations and types of redevelopment, and we gave priority to larger projects that had been completed.

- Aylesbury College;
- Barton Peveril College, Eastleigh;
- Derby College;
- Loreto College, Manchester;
- Merton College;
- Middlesbrough College;
- New College Durham;
- South Devon College, Paignton;
- South East Essex College of Arts and Technology, Southend; and
- York College.

5 During each visit, we conducted in-depth, semi-structured interviews (around 70 in total) with a variety of stakeholders including principals, finance directors, project managers, contractors and where available regional Learning and Skills Council representatives. We also held focus groups with staff and learners which typically consisted of three staff and three learners. All visits included a tour of the buildings.

6 The interviews covered governance, project management, financial management, interaction with the Learning and Skills Council, and the results of the projects. The aim in holding focus groups was to gain opinions from the users of the college buildings on the success and impact of the projects and their involvement in the process.

7 Prior to each visit, we reviewed the project files held by the Learning and Skills Council. This provided us with background knowledge of the projects and allowed us to assess the project approval process.

8 As part of our planning work, we also visited Hastings College of Arts and Technology, Westminster Kingsway College and Stephenson College (Leicestershire) to help define our study scope and to gain a better understanding of the programme prior to the case study visits.

Interviews with stakeholders

9 We held interviews with the Learning and Skills Council at local, regional and national levels. The main objective was to discuss:

- processes for assessing and approving individual project applications;
- management of the capital programme at a national level;
- local relationships with individual colleges and the support provided; and
- future plans for the programme.

10 Interviews were conducted with the other major stakeholders, including the Association of Colleges, Constructing Excellence, the Office of Government Commerce, and the National Union of Students, to obtain their views and experiences of the capital programme.

Data analysis

11 The Learning and Skills Council provided us with databases including: project data based on the detailed project approvals and approvals in principle; the eMandate database of college estates; and, the Individual Learner Record which includes information on learners enrolled in colleges.

12 In order to link these data sources together for analysis, we cleansed the project database to remove duplicate projects and check that the names of colleges were correct. We also reconciled the two different project databases to make sure that the information for each college was consistent, checking all inconsistencies against the Learning and Skills Council's project files.

13 As eMandate was only in its third year we interviewed IPD Occupiers, which manages the database, to discuss data quality and coverage. Due to the low response rate for some questions we also checked the data quality of the fields that we used.

14 Once this was completed we matched all the college names on the different databases as the Learning and Skills Council does not have unique college identifiers on all its databases. We then linked these databases together and linked them to the results of our college census.

15 The analysis was conducted by the National Audit Office and reviewed by the Learning and Skills Council and included quantitative analysis on:

- identification of reasons for colleges undertaking projects;
- contract strategies used by colleges;
- examination of project costs, and reasons for exceeding budgets and timescales in order to identify possible trends;
- performance of the new buildings in comparison to the facilities they replaced;
- assessment of the management of projects and the effective use of resources;
- the degree of sustainability of the new buildings; and
- the overall level of success of the programme in relation to the quality of the new buildings and the effect on learner participation.

Consultation with panel of experts

16 We met with a panel of experts prior to conducting our fieldwork in order to develop our issue analysis, after we had completed our fieldwork to comment on our emerging findings, and we invited them to comment on our draft report. Those involved in one or more panel meetings were as follows:

- Mark Ager — Director of Finance and Business Information, Westminster Kingsway College
- John Bryan — Partner, Bond Bryan Architects
- Julian Gravatt — Director of Funding and Development, Association of Colleges
- Philip Head — Director of Infrastructure and Property Services, Learning and Skills Council
- Rosalind Lester — Further Education Infrastructure Lead, Department for Innovation, Universities and Skills
- Mike Riley — Consultant and former finance director of a college
- Stephen Sheedy — Principal, Queen Mary's College
- Beth Walker — Vice President (Further Education), National Union of Students
- Robert Whitaker — Policy Officer (Further Education), National Union of Students

Finance director workshop

17 We held a workshop with a group of college finance directors to identify ways to: improve the capital process; disseminate good practice with particular regard to project management; and establish better risk management with regard to college finances. Our consultant, Mike Riley, assisted with running the workshops.

Research review

18 We examined a number of reports, some prepared by consultants for the Learning and Skills Council, and others produced independently. These reports related to this programme, similar capital programmes, and construction projects more generally. We also reviewed reports on the further education sector and its financial health. To verify Frontier Economics' work on evaluating the impact of capital spending on colleges, we reviewed the methodology that it used in both its original and follow up reports and verified that its results that we quoted in our report were statistically significant. We are satisfied that the methodology adopted by Frontier Economics was appropriate given the data limitations.

APPENDIX TWO

Comparison of capital programmes in further education in Scotland, Wales and England

	Scotland	Wales	England
Number of further education colleges	39	23[1]	376
Status of further education colleges	Independent corporations	Independent corporations	Independent corporations
Funding of further education colleges	The majority of colleges' funding comes from the Scottish Further and Higher Education Funding Council (SFC).	The majority of colleges' funding comes direct from the Welsh Assembly Government (WAG).	The majority of colleges' funding comes from the Learning and Skills Council.
Estimated size of estate 2006[2]	About 0.8 million square metres.	About 0.7 million square metres.	About 8.2 million square metres.
Condition of estate 2006:[2]			
■ Percentage space 'as new' or 'sound'	51	60	53
■ Percentage space 'inoperable'	2	6	5
Capital funding	£25 million is allocated according to a formula. The balance is allocated to individual projects based on approved business cases. Total capital grants allocated in 2007-08: £88 million.	Colleges bid for capital grants to support their projects. Further education capital expenditure in 2007-08: £14 million.	Colleges bid for capital grants to support their projects. Capital grants budget in 2007-08: £404 million.
Approach to modernisation and renewal	■ Prioritisation of funding was based around a survey of the condition of college estates carried out in 2000. The Funding Council has commissioned a new survey to be completed summer 2008 which will determine where funding is now most essential. ■ The Funding Council provides expertise in project management capability through its property support team.	■ Capital expenditure for the further education estate in Wales is low and no growth is planned. ■ The Welsh Assembly looks at the education sector as a whole and favours projects that collaborate with schools or higher education.	■ Projects must meet educational and property needs and be economically justified. In 2006, the Learning and Skills Council prepared regional strategies to help target project funding on areas of greatest need. ■ The Learning and Skills Council provides property-related support to the programme through its national infrastructure and property services team.

NOTES

1 A report in December 2007 recommended that the number of colleges should be reviewed as part of an exercise to reconfigure the further education sector.

2 From colleges' returns to eMandate 2005-06. Data is incomplete as not all colleges responded to eMandate. It also includes some buildings not for daytime further education use, such as leased space for evening classes and residential and farm use in agricultural colleges.

APPENDIX THREE

Learning and Skills Council criteria for capital applications

Educational case

The educational case identifies projected learner demand and outlines the curriculum delivery to address this demand in the context of government initiatives. It should be based on the college's three year strategic development plan as approved by the Learning and Skills Council, and consistent with:

- LSC Strategic Review;
- LSC Regional Capital Strategy;
- LSC Local Capital Plan; and
- College Property Strategy.

The educational case should make particular reference to:

- 14–16 learners;
- 16–19 learners;
- collaboration with schools and other local providers;
- specialist provision for learners with learning difficulties and/or disabilities;
- Skills for Life;
- Contribution to National Skills Academy or Centre of Vocational Excellence, or the delivery of the 14–19 Diplomas;
- adult education; and
- higher education provision.

The case should refer to relevant issues in Strategic Area Reviews, area wide inspections and Ofsted inspections.

The case needs to consider learner growth projections for three years after construction completion as a minimum.

Property case

The property case considers whether:

- the project materially improves the quality of the provider's buildings;
- the proposed buildings are of an appropriate type;
- the building design enables access by people with physical and sensory disabilities and will meet the relevant statutory requirements;
- the building is energy efficient and addresses sustainability;
- the gross and net floor areas are appropriate;
- listed buildings are involved;
- health and safety issues have been considered and all legal requirements met;
- there will be adequate continuity of provision for learners during construction; and
- opportunities are being taken for site and premises rationalisation and for their more cost-efficient operation.

Economic appraisal and affordability analysis

The economic appraisal and affordability analysis considers whether:

- the options considered are economically appropriate;
- all reasonable options have been evaluated;
- the appraisal includes all relevant costs and benefits and only relevant costs and benefits;
- the appraisal includes the cost of land;
- the project could be broken down into several smaller projects including at least one project that has a higher net present value than the proposal;
- the project secures a satisfactory return for the UK economy;
- the provider's contribution to the project is satisfactory, (bearing in mind any windfall gains, for example from sales of property);
- the planned profile of expenditure has been realistically constructed and has taken account of the provider's financial forecasts; and
- there has been full consideration of the implications of VAT and other taxes.

For affordability criteria see Appendix 4.

APPENDIX FOUR

Learning and Skills Council affordability criteria for capital applications

1 Colleges are expected to submit financial plans as part of their application for Learning and Skills Council funding, to demonstrate that the college can afford to undertake the project while sustaining or improving its financial health in the medium term to financial health Group A or a strong Group B.

- Group A: Colleges that appear to have sufficiently robust finances in order to implement their strategic three-year development plans and to deal with the circumstances most likely to occur during the planning period.
- Group B: Colleges demonstrating signs of financial weakness that might limit their ability to implement their strategic and three-year development plans should they encounter adverse circumstances during the planning period. Colleges in this group are likely to have weaker solvency than those in Group A.
- Group C: Financially weak colleges that are (or may become) dependent on the goodwill of others. This might involve, for example, a loan from their bank for solvency purposes. These colleges are at significant risk of failing to deliver their strategic and three-year development plans. The Council expects colleges in Group C to develop plans to improve their financial health to Group B or A before bringing forward a capital project.

2 Colleges are asked to produce financial forecasts for a range of grant levels.

- If the financial plan indicates the financial health of the provider, by the third year after completion of the project, is other than Group A or a strong Group B, the college must produce forecasts based on at least two higher levels of grant.
- If the financial plan indicates very strong financial health by the third year then the college must produce forecasts based on at least two lower levels of grant.
- The final submission for detailed approval normally includes the recommended grant level and then one higher and one lower support level for the purposes of comparison.

3 Colleges that have substantial cash reserves are required to use these funds before any capital grant support.

4 The Council expects colleges to increase their borrowing to reasonable levels to finance capital projects. Colleges currently in Groups A and B are expected to have a borrowing level normally in the range of 30 to 40 per cent of total income by the third year after substantive completion of the project. For colleges currently with a financial recovery plan (Group C), the normal range is 15 to 25 per cent of total income. The Council expects colleges to plan for repaying capital borrowed for projects over 20 to 25 years.

APPENDIX FIVE

Learning and Skills Council reviews

Title and purpose	Results and action taken
Evaluating the impacts of capital projects The Council commissioned three studies (one from PricewaterhouseCoopers and two from Frontier Economics) in 2003 and 2005-07, which attempted to estimate statistically the impact of capital expenditure in colleges on their performance	The studies demonstrated some positive effect on learner outcomes from capital expenditure, but conclusions were constrained by the quality of the data available. In January 2008 the Council commissioned further work from Frontier Economics. This will develop (further) a framework for understanding the impacts of capital projects, and develop a robust dataset for the evaluation. By December 2008 the consultants will do a process evaluation using five case studies, identify ways to improve future delivery and produce reports for each case study, and a spreadsheet summary that the Council can use to assess the likely impact on a given college of carrying out a capital projects of particular sizes and types.
Turner and Townsend review of the relationship between building cost, design and quality in the further education sector This review, which reported in January 2006, comprised an analysis of capital costs and a structured assessment of quality of a sample of 28 college projects completed within the previous four years. Design quality criteria drew on similar initiatives by bodies including the Commission for Architecture and the Built Environment and the Royal Institute of British Architects. The criteria took account of functional objectives for different types of college, and issues such as costs-in-use and sustainability. Costs data were normalised to ensure like-for-like comparison, irrespective of project timing, location or abnormal costs. An evaluation matrix was developed to link design benefits to costs.	The review found a general correlation between cost and quality, and concluded that the projects generally represented good value for money. But it noted that there could be a case for selective increases in the costs allowed, which if carefully targeted could give disproportionate increases in quality.
KPMG review of the approaches to capital investment in the post-16 sector The Council commissioned KPMG to assess whether its current approach to capital grants was assisting colleges in meeting the needs of learners whilst focusing on developing world class buildings in which to deliver world class education and training, and KPMG reported in April 2006.	Although KPMG did not find any need for substantive change to process, they made a number of detailed recommendations in areas such as investment appraisal, approvals processes, support to colleges and procurement – most of which the Council has accepted and is continuing to implement.
Grant Thornton review of capital investment appraisal Grant Thornton reviewed the Council's approach to capital investment in 2007.	Grant Thornton produced a new appraisal model which takes account of the wider economic benefits that a new capital project could generate. The Council intends to make the new model available to the college sector from August 2008. Training for the Council's regional staff involved in capital projects began in May 2008.
Capital Affordability Review The purpose of this review, which reported in February 2008, was to consider the affordability of the current system of capital grant support to further education colleges within the context of the current affordability policy of the Council.	The review recommended a number of capital policy changes to increase the manageability of the capital payments system and help to ensure that the Council can continue to manage its capital budget within the available funds. The Council will present the conclusions to the national capital committee and reflect them in updated guidance.

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Renewing the physical infrastructure of English further education colleges

A report by the Comptroller and Auditor General

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