OBTAINING BETTER VALUE IN EDUCATION: 
ASPECTS OF NON-TEACHING COSTS 
IN SECONDARY SCHOOLS
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Summary

Education costs running at the rate of about £12 billion a year account for around half of local authority revenue expenditure. This study looks at non-teaching costs in secondary schools, which themselves amount to over £1 billion a year. It is based on a study of 12 authorities and 140 schools within them.

The Commission concludes that changes are required. In particular there are today already 500,000 surplus places in secondary schools brought about by the fall in the birth rate in the mid-seventies. This compares with some four million places currently being used. If no action is taken to reduce the capacity of education establishments, the number of surplus places would exceed one million by the end of the decade; and the quality of education would almost certainly suffer as well.

In 1983 at a typical secondary school, the non-teaching costs amounted to some £285 a pupil. Four opportunities have been selected by the Commission as being of major importance:

(i) The tailoring of places available to meet the number of places required to be filled. This should be a priority for each Local Education Authority. There need to be detailed plans for implementation, which will have taken into account all the options open to the Authority with the costs and educational consequences attributable to each. The criteria for achieving the necessary reductions in places should be agreed in advance and procedures should be clearly defined to enable the communities involved to know the facts and consequences of implementing or failing to implement the plans. The report suggests that each Authority should deal with its problems in a comprehensive rather than in a piecemeal manner.

(ii) There is evidence that schools are not as well maintained as they could be; and a higher rate of investment would reduce maintenance costs in the longer term. Nonetheless, there are good opportunities to improve the day-to-day maintenance and at less cost by:

- assigning responsibility for individual schools to a named person in the maintenance organisation;
- encouraging schools to take appropriate preventative measures and experiment with "handy person" schemes to reduce demand on the central maintenance organisation;
- improving response times by setting up mobile maintenance teams and establishing target response times for particular tasks;
- increasing inspection of maintenance work, to around 50 per cent of all jobs carried out by direct labour;
- tightening financial control by agreeing schedules of rates and individual school maintenance budgets and by ensuring that all maintenance is put out to tender in a way likely to attract competitive bids.

(iii) Cleaning of schools is not always dealt with as efficiently as possible. The Commission believes that up to £50 million a year can be saved
without impairing the quality of service. To achieve savings authorities will need to:
- modify the cleaning assistance formulae of Provincial agreements;
- introduce productivity schemes based on a target of 33 sq metres per cleaning hour;
- use caretakers more appropriately;
- provide cleaners with the appropriate materials and modern equipment.

(iv) There is need to have the control and responsibility for expenditure as close as possible to the point where it is being incurred. At present capitation schemes give heads and local governors control over less than five per cent of the annual expenditure of a school. The Commission believes it would be beneficial to achieve a figure closer to 25 per cent; this would embrace examination fees, the provision of utilities including telephones, cleaning, maintenance and the various costs associated with teaching support staff. A greater degree of delegation will need careful introduction to avoid the risk of abuse. The report recommends that:
- it should develop progressively, with the lead being taken by a few schools where heads and governors are enthusiastic
- information systems should be able to provide heads with the necessary data on expenditure against budget month by month, on a timely basis
- head teachers and their deputies should have some management training before they are expected to shoulder additional responsibilities; only those heads with the skills required should be given increased delegated powers.

A failure to cope successfully with the opportunities referred to in (i) to (iv) above and to deal with other opportunities to achieve better value for money could adversely affect the quality of secondary education for some students, would lead to a rise in unit costs and could deny the availability of scarce funds required for other needs, for example those of the very old.
Introduction

1. Education accounts for about half of local authority expenditure; so improved value for money in local authority services as a whole must depend in a large part upon improved value for money in education. The Audit Commission therefore intends to take a continuing interest in the education service in the search for greater economy, efficiency and effectiveness. In its first round of local authority audits, the Commission has arranged for some 150 Polytechnics and Colleges of Further Education (around one quarter of the total) to be examined in depth. The results of these investigations are being discussed with Local Education Authorities (LEAs); and the Commission expects to publish a report on further education early in 1985. In the meantime, preparations for the audits of the accounts for the year ending March 1985 are going ahead; and the Commission has determined that, in the course of their value for money work, auditors should concentrate particular attention on aspects of non-teaching costs in secondary schools. This report, which results from a special study conducted by the Commission, is being published now so that all concerned will know in advance what auditors will be looking for.

2. The Commission's interest in value for money in education is due to the nature of the managerial challenges facing the services as they seek to respond to a combination of financial and educational pressures:
   (a) general financial constraints stem from the decreasing proportion of relevant expenditure funded by central government grant and the penalties of exceeding targets.
   (b) specific pressures result from the dramatic fall in pupil numbers now affecting the secondary phase of education. That fall is from about four million pupils in 1980 to about three million in 1990. Within the grant arrangements pupil numbers constitute the largest element in the distribution of grant. Therefore, if a local authority carries a larger number of surplus school places it faces an increasing financial burden; in effect this reduces the resources available to the authority to meet growing needs and demands (e.g. for the services for the elderly).
   (c) educational pressures result from a number of changes intended to improve the service:
      - the Manpower Services Commission is to fund a quarter of non-advanced work-related education;
      - children with special educational needs are, as far as is practicable, to be educated in ordinary schools;
      - parental choice is subject to a new set of procedures;
      - there is talk of continual testing of pupils' performance and ability, and the powers of school governors and the composition of Boards are under review;
      - the Secretary of State has called recently for a reduction in the size of the teaching force and more investment in in-service training to ensure that all teachers in practice are as effective as they could be;
      - there is continuing fundamental review of the curriculum.
Exhibit 1

Study has covered almost three-quarters of relevant costs

BREAKDOWN OF NON-TEACHING COSTS IN
SECONDARY SCHOOLS
1983-4 Estimates

Source: CIPFA
This list is by no means complete; and there are, no doubt, more changes in the pipeline.

3. Against this background the Audit Commission considered that this review should be limited to examining some elements of non-teaching costs. Because the impact of falling rolls is now largely upon the secondary phase of education it was decided to concentrate on the costs of secondary schools. Exhibit 1 shows the distribution of secondary school non-teaching costs between heads of expenditure; the total was £1.35 billion in 1983–4. Following consultation with education officers, local authority associations and other interested bodies, some particular areas were identified for study: building capacity affecting £550 million of premises-related expenditure, cleaning (£190m), and day-to-day maintenance (£90m).

4. The study team consisted of an officer from the Commission's Special Studies directorate, Herbert Benham, two deputy chief education officers seconded part-time for the period, and the management consultants, Deloitte Haskins and Sells. The study took place in the period November 1983 to April 1984. Following a review of background material, detailed fieldwork was undertaken. It was systematised by the preparation of a questionnaire and aide-memoire which was pilot tested in three authorities. The report is based on an analysis and evaluation of information from twelve authorities and a sample of 140 schools distributed amongst them. The participating authorities comprised three outer London Boroughs, four metropolitan district councils and five non-metropolitan county councils. They were chosen so as to obtain a cross section of practice by considering: authority type, geographic location, size, socio-economic characteristics, and particular experience relevant to the issues.

5. Using the questionnaire and aide-memoire, a wide variety of people were interviewed in the participating authorities. They included Chairmen of Education Committees, other committee members, Chief Education Officers and education department staff, head teachers and some of their staff, trades union representatives, Treasurers and other finance staff, and officers from technical departments concerned with building maintenance. The conclusions arising from the work have been discussed with a wide cross-section of the interests involved. The Commission is very grateful for the help and co-operation it has received in particular from the Education Committees in the twelve participating Authorities as well as the Education Committees in Leeds, Northumberland and Somerset, for releasing senior officers to work with the Commission's staff on this study. However, responsibility for the main conclusions rests with the Commission, which is independent of the special interests involved and is concerned solely, in this case, to help authorities secure better value for money in secondary education.

6. The most important conclusion of the study is that changes in approach to the problem of falling school rolls are required. Unless authorities are able to tailor education capacity more closely to demand, total costs per secondary school pupil are likely to rise and the quality of secondary education for many students will be lower than it could or should be. The problem is urgent. Today, there are around 500,000 secondary school places surplus; by the end of the decade, the figure could well exceed one million unless steps are taken. All secondary school reorganisation proposals encounter stiff opposition at the local level. Yet the costs of doing nothing are unacceptably high in many cases:

(a) the quality of education suffers, as it becomes impossible to provide the breadth of curriculum desirable with the resources available.

(b) costs borne by the ratepayer are higher than they need be: one education authority calculates that it is spending almost £1m a year
more by keeping a single school open that could be closed. The protestors (around 200 families in this case) are, in effect, levying a tax of £1m a year upon their fellow citizens.

(c) money is wasted: authorities are forced to spend scarce resources cleaning, heating and maintaining buildings that are not needed.

The first part of this report describes the problems, suggests how they can be tackled and outlines the changes desirable if the risks inherent in falling school rolls are to be managed successfully.

7. The second main conclusion from the study is that, quite apart from the problem of surplus capacity, there are opportunities to obtain better value from the annual investment of over £1.3 billion in non-teaching costs in secondary schools. In particular:

(i) School maintenance needs to be improved. There is persuasive evidence that day-to-day maintenance is less efficient than it could be: costs are, generally, excessive and response times too slow. On the other hand, authorities have responded to the financial pressures described above by reducing expenditure on long-term maintenance to the point where the state of many school buildings gives legitimate cause for concern. The report summarises the evidence for the Commission's concern and suggests the steps required:

- some streamlining of procedures: there is often a duplication of paperwork and a blurring of responsibilities;
- use of schedules of rates rather than time and materials for contracts;
- sound comparison of tenders, particularly those of private contractors, against Direct Labour Organisations (DLOs). This requires that knowledge of work mix be available to all and that private contractors be offered contracts commensurate with their size and specialism;
- improvement in many DLOs' quality and response times. In addition, Education departments need more control over the maintenance budget;
- adventurous consideration of money saving schemes, for example use of caretaker/handypersons in schools and use of mobile maintenance teams;
- a better knowledge of the extent of damage by vandalism and whether poor appearance of buildings encourages it; and more effective measures for prevention of vandalism.

(ii) Cleaning costs could be reduced by around 25 per cent (or some £50m a year) without unacceptable consequences in terms of the quality of service. The gains are possible by improving cleaners' productivity to an average of 33 square metres (around 350 square feet) an hour. Many authorities still subscribe to provincial council agreement formulae whose parameters were established long ago. Other authorities use local variations of these agreements. Productivity schemes are generally more economical than those based on provincial council formulae. In general under productivity schemes the employee receives greater pay but produces an even greater output. Even where, for one reason or another, an authority deems it wiser to retain a provincial council formula there is frequently plenty of scope to update the scheme to reflect the changing nature of areas and surfaces to be cleaned and the changes in equipment available.

(iii) There is not enough delegation of responsibility and authority to the local school level. The Financial Management Initiative launched by
central government in 1982 expounds the view that greater delegation needs to be encouraged. This accords with the philosophy of the Audit Commission set out in its handbook on *Economy, Efficiency and Effectiveness* which encourages greater delegation within local authorities. Moreover, the 1944 *Education Act* envisaged that schools should prepare annual budgets which would be discussed and agreed with the governors and funded by the LEA, which would be concerned mainly with matters of broad policy. In most authorities, this is far from the present reality. However, many difficulties will have to be overcome if delegation is to be increased effectively:

- headmasters are often sceptical, if not opposed, to having to accept more managerial responsibility at a time when so many difficult pressures have to be faced;
- even if they have the inclination, many heads lack both the training and experience to manage organisations with budgets of £1m or more;
- the management systems are not in place to provide heads with accurate and timely information on expenditure trends; and many schools do not have the equipment (e.g. computer terminals, on-line management information) and support staff to use it;
- in most Local Education Authorities both members and officers at the centre are reluctant to see power and influence shift to the local level - especially given the financial and educational pressures to which they are now subject.

The second part of this report deals with each of these opportunities in turn.
1 Tailoring Secondary School Capacity to Likely Demand

8. The forecast decline in secondary pupil numbers is dramatic, from a total in England and Wales of just over four million at the beginning of the 1980s, to less than three million in the early years of the 1990s. An upturn is then expected to begin in the 1992-93 academic year. Typically in the sample LEAs secondary pupil numbers are expected to fall by 25–30 per cent over the next ten years. In many authorities, however, there is considerable variation around this average with "pockets" of growth in some localities counterbalanced by an expected decline of 40 per cent or more in others. The problem is most acute in inner-city areas and those where economic prospects are poorer (causing families to move).

9. The current decline in the secondary school population presents both opportunities and problems to LEAs in their efforts to maximise the use of school buildings. It may be possible to take out of use old, unsatisfactory, high cost buildings (which may occupy valuable sites) or temporary buildings (usually with high energy consumption costs) which were erected to meet rising school rolls in the 1970s. It also raises the highly sensitive issue of school closures, not only of schools housed in old buildings, but of schools erected in the 1960s and 1970s.

10. *A Study of School Building*, published by the Department of Education and Science (DES) in 1977, estimated that in 1986 there would be over one million surplus secondary places in England and Wales - after allowing for every pupil to enjoy space standards comparable to those of a well designed new school, namely 6.5 square metres gross area per secondary place. The study concluded that about 0.5 million secondary places could be removed by 1986 in England and Wales to the long-term benefit of the education service. This figure allowed for three out of every five surplus places to be retained in recognition of the need to take account of the eventual upturn in births, and the difficulty in practice of separating some notionally surplus places for which there was still a continuing requirement.

11. Between 1975 and the end of 1980 English LEAs removed from use 62,000 secondary places. DES Circular 2/81 on *Falling Rolls and Surplus Places* was designed to provide information on the number of pupil places LEAs planned to take out of use between 1981 and the end of 1986. An arbitrary target of removing two out of every five surplus places was set for every LEA. The DES analysis of LEAs' plans in response to circular 2/81 showed that they intended to take out of use 357,000 secondary places during the period; 233,000 permanent places and 124,000 temporary places.

Table 1 below summarises the present position according to the DES.

**Table 1: SECONDARY SCHOOL ROLLS 1981-1986**

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Taken out of use (cumulative)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Actual</td>
<td>35</td>
<td>70</td>
<td>120</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Planned</td>
<td>40</td>
<td>93</td>
<td>150</td>
<td>222</td>
<td>292</td>
<td>357</td>
</tr>
</tbody>
</table>
Unless action is taken soon, non-teaching cost per pupil will rise by £50-60 a year as rolls fall.

**INCREASE IN NON-TEACHING COSTS PER PUPIL**

£/year, at 1983 prices

Source: Analysis of school accounts
It will be apparent from the table that:

(a) even if Local Authorities are able to implement their plans as revealed to DES (the "planned" figure in the table is based on full returns from 63 English LEAs and estimates from 34 partial returns) there will be at least 200,000 more surplus places at the end of 1986 than there were at the beginning of 1981

(b) during the first three years of the period, LEAs' achievement in terms of surplus places taken out of use fell short of their own plans by around 20 per cent

(c) unless the pace of rationalisation accelerates markedly, the situation will worsen. During 1981-1983, an average of 40,000 places a year were taken out of use (of which 9,000 were temporary places). If this pace is maintained, by the end of 1986, the shortfall against LEA projections will be 33 per cent, and there will be over 300,000 more surplus places at the end of 1986 than there were in early 1981.

12. Clearly, failure to take action in face of falling school rolls will be expensive. DES circular 2/81 suggested that every 100,000 surplus school places taken out of use should on average yield savings in premises costs approaching £10 million (or £100 per place) per annum. Any potential savings on teachers' salaries or capital receipts from the sale of buildings were excluded from this figure. Closing parts of schools was recommended for consideration by LEAs where rolls did not fall sufficiently to permit whole schools to be closed, or as an interim measure until the closure of a whole school becomes possible.

13. A study by the DES Architects and Building Group, Design Note No. 28, of a town (120,000 population) in southern England showed that by taking appropriate action with regard to surplus accommodation, to meet falling rolls, an LEA could achieve a saving of £200,000 per annum - or over £80 million on a national scale. A helpful analysis of falling school rolls and premises-related costs is to be found in DES Design Note No. 27 (October 1981), which shows that if rolls fall, premises-related cost per pupil can rise rapidly, as these costs are, in the main, fixed irrespective of the number of pupils in the schools. Exhibit 2 illustrates the impact on total annual cost per pupil (including teaching costs) of falling rolls in a reasonably typical secondary school with 830 pupils.

Rates are different in nature to other premises costs in that they generally vary in line with pupil numbers - so long as LEAs take appropriate action to reduce rating assessments for their schools.

14. Table 2 below shows the overall financial implications, excluding changes in teaching costs, of pupil numbers falling from nearly four million at present to three million by the beginning of the 1990s, and shows potential savings in relation to number of school closures. The magnitude of the savings which accrue from the removal of surplus places depends crucially on the particular local circumstances, and especially on the method of removal.

<table>
<thead>
<tr>
<th>Assumed Numbers of School Closures (over 5 years)</th>
<th>Annual Average</th>
<th>Annual Savings £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total 220</td>
<td>44</td>
<td>43</td>
</tr>
<tr>
<td>440</td>
<td>88</td>
<td>85</td>
</tr>
<tr>
<td>660</td>
<td>132</td>
<td>128</td>
</tr>
<tr>
<td>880</td>
<td>176</td>
<td>170</td>
</tr>
<tr>
<td>1,100</td>
<td>220</td>
<td>213</td>
</tr>
</tbody>
</table>
The process for reorganising secondary schools is long and complex
THE REORGANISATION PROCESS IN SECONDARY SCHOOLS – 1984

### TYPICAL TIMING

<table>
<thead>
<tr>
<th>TIMING</th>
<th>KEY STEP</th>
<th>END PRODUCT</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-6 months</td>
<td>Demographic projections and capacity studies</td>
<td>Estimate of likely &quot;spare places&quot; and educational consequences</td>
</tr>
<tr>
<td></td>
<td>Determination of options for under-utilised schools</td>
<td>Options paper (with costings) for LEA</td>
</tr>
<tr>
<td>6-12 months</td>
<td>Discussions with interests involved</td>
<td>Detailed LEA proposals</td>
</tr>
<tr>
<td></td>
<td>- Governors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Trades Unions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Parents</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Publication of Education Committee proposals, including implementation timetable</td>
<td></td>
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<tr>
<td></td>
<td>Submission of objections</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- any 10 or more local electors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- governors of voluntary schools affected</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- other LEAs concerned</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Transmittal of proposals and objections to Secretary of State for Education</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Approval, modification or rejection by Secretary of State</td>
<td></td>
</tr>
<tr>
<td>6-12 months</td>
<td>Implementation</td>
<td></td>
</tr>
</tbody>
</table>
The apparent DES target for LEAs of removing two out of every five surplus places implies between 90 and 120 school closures a year between now and the end of the decade - a marked increase on the average of around 50 over the last six years. Even allowing for the fact that the more extreme assumptions may be unachievable in practice (e.g. because of the difficulty of maintaining the average size of the school in rural areas) it seems reasonable to conclude that the potential cost savings available are between £100 and £150 million per annum. Changes in teaching staff costs have not been included, of course; neither have the potential educational benefits of some rationalisation of capacity, in the shape of the affordable breadth of curriculum.

15. The savings are some £230 per place per annum at 1983-84 prices. The extra savings, over and above the £100 per place per annum quoted in Circular 2/81, are, apart from inflation, in respect of interest savings generated by the sale of surplus land and buildings - offset in part by an increase in the cost of home-to-school transport. If the maximum annual savings theoretically of the order £215 million were to be achieved some capital expenditure on new buildings will be necessary.

Some capital expenditure will be necessary anyway in the 1990s, because the growth in pupil numbers may not occur in the convenient areas (i.e. where there is surplus accommodation) any more than does the fall in pupil numbers. Moreover, it is difficult to forecast the impact of technological change on teaching patterns in the 1990s and beyond; but it seems unwise to assume that the electronic revolution (e.g. the availability of interactive video programs) will have no effect on the way children are taught. It is not necessarily correct therefore to assume either that the greater the number of schools closed, the higher will be the likely capital expenditure in the 1990s or the converse.

16. The costs of failing to rationalise secondary school capacity are not merely economic. Indeed, almost all proposals to close secondary schools are made not on economic grounds at all, but on educational ones: there comes a time when local education authorities cannot afford to provide teachers to support a reasonably broad curriculum in small schools*. For instance, a recent examination of sixth form education in one city showed that half the pupils were being taught in classes of six or less. With the shortage of teachers for some specialist scientific subjects such a situation is simply not sustainable.

17. There are other, less obvious consequences of failure to take action. The grant-related expenditure formula for education is based largely on schools’ rolls, with a 21 month time lag. Thus, whether or not an LEA acts to bring capacity into line with demand, the present block grant system assumes that it has; and the grant is reduced accordingly. In effect, therefore, the costs of failure to act in time will be carried by a combination of the local rate payers and by those services - most notably social services for the elderly - where there is increasing demand for local authorities' support.

18. As Exhibit 3 shows, the process for school closures is a long and complex one. The rest of this chapter suggests the steps that need to be taken locally and at the national level to tailor secondary school capacity more closely to the demand for places.

* See, for example, paragraphs 11–13 of DES Circular 2/81.
19. All LEAs should undertake a comprehensive review of secondary school capacity to determine whether changes are needed to sustain an affordable broad based curriculum and to avoid unnecessary waste of scarce resources. This review should comprise the following four main stages:

(i) The first stage is to identify needs and places. A robust method of accurate population forecasting is required. The LEA must check its existing building stock, and ensure that its method of measuring capacity is appropriate.

(ii) The second stage is the appraisal of options. There should be a clear definition of who is responsible, and the role (if any) of departments other than education should be specified. Full information on all the available options should be made available to the decision-maker.

(iii) The third stage is to implement the selected option. Premises closures as a result of either school closures or amalgamations are generally the only method of removing surplus places which yields significant financial savings and educational benefits. However, closures invariably run into stiff local opposition. Successful implementation of premises closures therefore requires, inter alia, political will and the means to persuade communities to accept initially unpalatable changes. LEAs may consider re-investing at least part of the proceeds of sale. If schools, after closure, are not disposed of, but are diverted to alternative uses then the full costs of that decision should be identified. The removal of temporary accommodation is relatively straightforward and achieves worthwhile savings.

(iv) The final stage is that LEAs should check that the intended costs and benefits have accrued, to improve future appraisals and current management performance.

20. Clear decision criteria should be established by LEAs when undertaking reviews, taking in both educational and financial factors. The financial appraisals should be "broad brush"; it is more useful to be roughly right than precisely wrong. But all the key variables should be included with an assessment of their sensitivity. A timetable and frequency of review should be established, with a timescale which is appropriate to the problem being tackled - taking into account the length of the consultation procedures.

21. The first step is to establish a project team to conduct the reviews. The Commission considers that the staff-work is most appropriately assigned to an inter-departmental working party led by a senior officer from the education department. Of course, this team will not undertake the work in isolation from members, since they will have regular contact with them - and in any case regular progress reviews should be arranged.

22. The review team will need to include senior officers from the authority's property and finance functions. Reviews of school accommodation cannot be undertaken in isolation from a wider evaluation of the authority's total future needs for buildings. Geographical, demographic and sometimes social constraints in addition to the basic educational considerations may limit the range of options for their detailed consideration. Nevertheless all procedures should ensure that a wide view is taken, when any option is under consideration, of the authority's needs and of the alternative future uses of surplus buildings. And it will be essential for the financial implications of the various options to be examined thoroughly.

23. Whatever the composition of the team, it is essential that responsibilities are well defined for undertaking the appraisal, reviewing the outcome and following up the results. Clear definition of responsibilities was generally lacking, for at least one of these areas, in most of the sample LEAs.
24. The first stage of the review is to compare present building capacity with likely future capacity requirements based on the LEAs' projection of pupil numbers over the next decade - to identify needs. Except in sparsely populated areas it is seldom possible to look at any single school in isolation. Some measure of reorganisation involving not only school closures but mergers and organisational change (e.g. the establishment of a sixth form college) may be appropriate. The geographical scope of the review may be any of the following; the whole LEA, part of the LEA or an area covering part or all of two (or more) adjacent LEAs. (None of the sample LEAs had undertaken joint reviews with adjacent LEAs of areas of population which "straddle" local government boundaries).

25. Important considerations being taken into account by the sample LEAs in the first stage of review included:
   (a) the needs of pupils aged 16 and over - in many authorities this was regarded as a key factor, with a marked increase in the numbers "staying on" at school.
   (b) the requirement for single sex provision.
   (c) the impact of neighbouring LEAs on both demand (from their pupils) and supply (within their schools).
   (d) the quality of existing buildings, and how to deal with sub-standard accommodation.
   (e) a minimum desirable size of school.
   (f) the impact of provision in and policies of voluntary schools.

26. Key assumptions clearly have to be made in reviewing secondary education as regards population and building capacity.

27. Unlike primary pupil numbers, it is possible to forecast secondary pupil numbers for up to some ten years ahead - without having to make any assumptions about future birth rates. Nearly all LEAs forecast pupil numbers, at least over the next decade, with the overall forecasts generally analysed by year groups, and for individual schools. However, in one of the shire counties visited, members had no overall view of the county's need since a summary is not prepared of the individual area forecasts. In some of the metropolitan and London authorities, forecasting was considered to be complex because of the high mobility of population; but, nevertheless, a high level of accuracy is claimed. The provisions of the 1980 Education Act regarding parental preference were considered by several of the sample LEAs to be making forecasts for individual schools more difficult than in earlier years, although "patterns" are emerging.

28. Most of the authorities visited in the study had undertaken (or were undertaking) an inventory check of their existing accommodation, reporting on the location, quality and capacity of their existing schools at the outset of the review. In assessing existing capacity two complementary approaches can be used:
   (i) Number of pupils as a percentage of the places available taking account of the area requirements specified in the Education (School Premises) Regulations of 1981. The number of places is probably a reasonable guide to school capacity for use by management for its own intra-authority reviews - particularly if derived using a curriculum-based approach. Because of its subjective nature, however, there is a major problem with the inconsistency of definition between different LEAs which means that this method is unlikely to provide a suitable basis for meaningful inter-authority comparisons.
   (ii) Floor space per pupil, when carefully defined, provides a more consistent measure than number of pupils as a percentage of the number of places. The DES yardstick area which underlies the
Exhibit 4

PROJECTED SECONDARY SCHOOL ROLLS: 1984-1993
Index 1984 (September) = 100*

*Assumes current participation rates

Source: Lincolnshire County Council
Education (School Premises) Regulations of 1981 is 6.5 square metres per secondary pupil place. This compares with an average of 7.6 square metres for the sample LEAs, a difference of almost 15 per cent. The minimum appropriate teaching area represents about 60 per cent of this total, the remainder being non-teaching space.

29. The purpose of the two related DES methods for assessing capacity is, however, primarily in connection with establishing the case for "basic need" places in growth areas. The places are assumed to be up to the latest standards. The application of these methods for other purposes e.g. LEAs' admissions policies, the estimation of surplus capacity for DES Circular 2/81 replies (where LEAs were invited to use their own methods) and in the formulation of reorganisation proposals are extensions of the original purpose into other fields. The results should be viewed with caution, particularly where buildings may not be designed to current standards. They are recommendations only. Yet there is little evidence of LEAs having critically reviewed their relevance to the LEAs' own unique "mix" of school buildings, having regard to age and suitability and provision of specialist accommodation for meeting staffing and curricular policies. There is little evidence either of individual authorities yet having used the curriculum-based approach, described in DES Design Note 34 on Area Guidelines for Secondary Schools.

30. The measurement of building capacity is of course a key variable in any review in determining the range of options to be considered. In one London borough visited a political decision has been taken to allow a margin of 10 per cent "spare" capacity across all its secondary schools for the next two years - to facilitate parental preference under the 1980 Education Act. The decision, taken at the same time as a comprehensive review of its overall secondary education provision, means that the problem of spare capacity is made to seem less severe than it is.

31. The fieldwork for this study suggests that systematic anlysis of capacity against demand for secondary school places is the exception rather than the rule. In many cases, LEAs did not know how much capacity they had in a particular area; in others, thorough projections of demand for places between now and the end of the decade were lacking. A need for a systematic review is illustrated by the current differences in capacity utilisation even within a relatively small sample of authorities. Since falling rolls will not affect each of the authorities shown in the table below equally, it will be even more important to consider the problems involved as soon as possible. To illustrate the scale of the problems facing many LEAs, Exhibit 4 shows the situation in one shire county.

<table>
<thead>
<tr>
<th>Authority averages based on sample schools within each authority</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Floor space (m²)</strong></td>
</tr>
<tr>
<td>-----------------------</td>
</tr>
<tr>
<td>High</td>
</tr>
<tr>
<td>Average</td>
</tr>
<tr>
<td>Low</td>
</tr>
</tbody>
</table>

* The figures shown are for 5 of the sample LEAs. Figures were not available for the others.

32. LEAs facing a serious imbalance between capacity and demand will have to consider closing schools completely or partially. Without exception, the sample LEAs believed that the significant financial savings and educational advantages of taking surplus places out of use would be
generated by school closures. Despite this belief, there was considerable reluctance to tackle this problem. This is scarcely surprising. Change is rarely welcomed; and any and every school can rely on support from parents, former pupils and the staff who will be affected. Often, the local Member of Parliament can be enlisted as well. Moreover, those who stand to benefit from the proposed closures - future pupils and ratepayers - rarely make their voices heard directly.

33. The removal of temporary accommodation is being tackled by most LEAs where it is appropriate although the economic advantages and educational advantages are less than with full closure. Officers, however, acknowledged the resistance often encountered to proposals for the removal of temporary accommodation through pressure exerted by head teachers and governing bodies for the continued use of such accommodation to upgrade the educational facilities available, and from the local community for community use.

Mothballing a whole school is a reasonable option only when there is a soundly based expectation that pupil numbers will require accommodation of the same type and in the same location. Even then it will require expenditure on maintenance and probably caretaking. No examples were found of mothballing of whole schools. Piecemeal mothballing of schools was evident in only two sample LEAs – both shire counties - where the estimated savings were small (£500 a room per annum) and the motivation seemed to be essentially political i.e. the members wanted to be seen by central government to be acting within the "spirit" of Circular 2/81.

34. Because school closures are so painful for all concerned and almost invariably encounter vociferous local opposition from parents, governors and staff involved (as well as local Members of Parliament in many cases), many authorities appear to be adopting what can only be described as an ostrich-like attitude - in the hope that something will turn up to make the closures unnecessary. The study provides a disturbing number of examples of refusal to face the economic and educational consequences of failure to bring capacity into line with demand:

- In one compact urban authority, despite an expected 30 per cent decline in secondary pupil members, the strategy to avoid closures was to reduce pupil numbers in the larger schools as bases for an anticipated future upturn in population. The selective schools were expected to drop to four form entry, and the non-selective schools to six form entry. The costs of implementing this strategy had not been compared with an alternative strategy of fewer, but larger, schools.

- In another small urban authority there had been some amalgamations, but no closures to date. Financial factors had played very little part in the decisions and, therefore, the cost of the strategy was not known. Amalgamations were favoured by other authorities - "they avoid the stigma of school closure".

- In one metropolitan district visited there is "spare" capacity in secondary schools, at present approaching 20 per cent (using DES work places to measure capacity), with an expected decline in secondary pupil numbers to come of some 30 per cent. The position will therefore be, if no action is taken, that schools will be only 50 per cent full. And yet in this authority the various options were still being considered in fairly broad terms. Furthermore, no decisions would be taken for at least a further four/five months because the local elections (in May) were approaching. The delay in taking decisions because of impending elections was not unique.

- Officers in another authority stated that their members wanted to delay, and if possible avoid, any secondary school closures because of
their recent difficult experience with primary school closures.

Financial advisers, whether from the treasurer’s department or from within the education department, have a very limited role in the reviews. This reflects the relatively low priority accorded to financial considerations. Typically, the treasurer would be asked to append a brief financial statement to the report on the chosen option only. This would give cost information only under broad LEA and national headings. The treasurer is not usually involved in the earlier stages where other options were available. The role of the treasurer in undertaking secondary reviews is, in fact, not always well-defined - with the division of responsibility between the education department and the treasurer’s department not being clear in many of the sample LEAs.

- There was little evidence of any analysis of fixed costs, which do not fall in step with falling pupil numbers, and variable costs, which do.
- Officers in a number of the LEAs stated that decisions on school closures and secondary reorganisations are dominated by political considerations and that calculating the costs and benefits of a range of alternative options is a waste of time. For example in one of the authorities visited, the officers stated that members had given them instructions not to include any financial evaluation of the options in the reports to committee.
- None of the sample LEAs had attempted to balance the recurrent costs of retaining surplus places and the possible capital costs of additional buildings at some future time.
- In considering options, risk and uncertainty had not been evaluated. LEAs undertaking these reviews are generally looking over a period of at least ten years ahead and, therefore, some assumptions about the future are required. Sometimes critical changes in these assumptions e.g. "staying-on" rates after 16, could seriously affect the balance of advantage between options.
- Opportunity costs, which may be very significant, were not being taken into account by the sample LEAs when considering the choice between options. If the LEA decides to keep open a school rather than sell the site, then the opportunity cost of that decision is the (estimated) net sale proceeds. Discounting techniques to bring cash flows over a time to a present value or, alternatively, methods of converting capital sums to revenue equivalents had not been employed.

35. The following steps are essential to any review of options:

(i) Determine the nature and extent of the potential problem for the authority as a whole, making a range of assumptions about key demand variables such as new local housing development, staying-on rates and so forth. These will need to be shown on a division by division or town by town basis.

(ii) Determine the cost of doing nothing in financial and educational terms, before any options are considered.

(iii) Agree in advance the main decision criteria. These will almost certainly need to be a mixture of educational and logistics e.g. maximum and minimum sizes for particular classes, acceptable maximum travelling distances and times.

(iv) Identify and cost the main options. In addition to all the normal teaching and non-teaching costs, the evaluation should take account of the opportunity cost of continuing to occupy the building and grounds (i.e. what the property might be worth to another user), and the value of any out of school uses to which the buildings are put.

(v) Evaluate the options both in educational and financial terms, taking
# FINANCIAL IMPLICATIONS OF METHODS OF REMOVING SURPLUS PLACES

<table>
<thead>
<tr>
<th>METHOD OF REMOVING SURPLUS PLACES</th>
<th>POTENTIAL SAVINGS</th>
<th>POTENTIAL COSTS</th>
</tr>
</thead>
</table>
| Premises closure/disposals through school closures or amalgamations | All premises costs eliminated  
Some savings in teaching and support staff costs — by avoiding the diseconomies of small schools  
Capital receipts generated if schools can be sold | Administrative burden eg. publications of notices, public meetings etc  
Home-to-school transport costs will increase to some extent  
Possible redundancy costs |
| Alternative use of schools | All premises costs are transferred to new user — provided that full costs are identified and an economic charge is levied | Mothballing costs |
| Mothballing whole schools | All premises costs — except for basic maintenance and rates | Mothballing costs |
| Piecemeal mothballing of schools | Savings mostly from:—  
(i) Fuel and light — if heating systems are zoned so as not to heat certain areas (£175 per room per annum)  
(ii) Cleaning assistance (£250 per room per annum)  
Small savings from decorating and maintenance costs (£75 per room per annum) | |
| Removal of temporary accommodation | Fuel and light — temporary units usually have high energy consumption costs, typically five times that of permanent accommodation  
Repairs and maintenance  
Cleaning assistance  
Income (if the temporary units can be sold) | Removal costs |
into account the possible risks (e.g. that demand may not be as projected, for given reasons), and the timing of changes, calculating the net present value or revenue profiles of the various choices.

36. Neither the DES nor CIPFA has developed a standard framework for costing the range of options available to LEAs facing falling school rolls. Exhibit 5 shows some of the costs to be taken into account. All the potential costs, with the exception of home-to-school transport are "one off"; all the savings are recurring with the sole exception of capital receipts. The figures included in financial appraisals do not necessarily need to be very detailed or precise. In some examples the figures seen have perhaps been too precise; the requirement is for a "broad brush" approach which quantifies the key variables and assesses their sensitivity. LEAs should, therefore, be able to improve practice in this area from within their existing staffing resources.

37. With the options clearly spelled out and evaluated in educational and financial terms, members will be able to reach informed judgements as to the course to be followed taking all relevant local factors into account. The Commission recognises that there are those who would rather not be "confused by the facts". But the scale of the problem and the unacceptable consequences of failure to act make this approach no longer tenable - if indeed it ever was.

38. Despite the general reluctance to face up to the problem of falling rolls, there are some notable exceptions. In one of the county LEAs visited, an annual systematic review of all buildings is undertaken by the education department in the context of an annual review of all aspects of the county council services. An officer group reviews surplus property for all services. Although members are reluctant to close rural schools, this review procedure does allow members to re-appraise situations regularly as circumstances change. The procedure seems to be properly used as an aid to decision-making. Appendix A shows an illustrative example of proposals for secondary school reorganisation.

39. The Education Act of 1980 sets out the statutory steps necessary to effect reorganisation of the schools and reduction of intakes in respect of the closure or amalgamation of schools. Public notice needs to be given where it is intended to reduce admissions to a school by one fifth or more. Very thorough and time-consuming local consultation regarding any proposed school closures is required with governors, parents, Church authorities (in the case of voluntary schools), teachers and local community.

40. Nearly all LEA proposals for closure meet with substantial local opposition. Nobody likes change; protest costs the protestor little and losses affect a few profoundly whereas the benefits are spread over all local ratepayers. The experience of many LEAs is that a group of well organised parents can delay if not frustrate plans for closure. It is difficult to overstate the difficulties involved. As the Chief Education Officer of Lincolnshire put it: "there are only two events that will fill the Empire Ballroom in Skegness: a Miss England contest and a meeting to discuss secondary school reorganisation". Not surprisingly, few officers and fewer members relish the prospect of asking local voters to confront unpalatable realities.

41. The experience of those LEAs who have sought to manage the problem positively is that there are some fairly obvious key requirements for success - in addition to political courage:

(a) sound staff work on likely capacity/demand imbalances. It is the general experience that protestors almost invariably begin by denying
SECONDARY SCHOOL REORGANISATION: A CASE EXAMPLE

1978: Agreement with Teachers Associations on approach to redeployment, in light of falling (primary school) rolls
1979: Peak numbers on secondary school rolls; preliminary Schools Sub-Committee consideration to reorganisation options
Early 1981: Consideration of detailed proposals deferred until after May County Council elections
26 October 1981: Report to Schools Sub-Committee; amalgamation proposals agreed from September 1983 or September 1984
20 November: Education Committee agrees
4, 8 December: Staff meetings at schools affected
11 December: County Council agrees
14 December: Joint governing body meets to discuss proposals
17 December: Parents meetings at each school
12 January 1982: Visit to schools by Education Committee
29 January: Meeting with Teachers Associations
11 February: Meetings of Schools Sub-Committee to review progress
17 March: Education Committee confirms approval
7 April: County Council confirms approval
6 May: Formal publication of notices
5 July: Discussion with Teachers Associations of appointment procedures to new (amalgamated) school
7 July: Education Committee agree admission zones
28 July: County Council agree admission zones
3 August: Authorities proposals and objections transmitted to Secretary of State
23 November: Approval of proposals by Secretary of State*
January-June 1983: Interviews and appointment to new school
September 1983: Reorganisation effective

* Average time for decision in the five most recent proposals put forward by the LEA is six months
that the problem exists. All the numbers and critical assumptions will be challenged. Mistakes are expensive; and it pays to err on the side of optimism (i.e. giving potential opponents of change the benefit of any legitimate doubt that may exist). It also pays to be very explicit about the critical assumptions made, so that these can be discussed openly and rationally.

(b) a comprehensive rather than piecemeal approach, so that the support of potential beneficiaries of changes can be enlisted to counter-balance the inevitable protests and to provide those concerned with a broad perspective.

(c) "Open Government". Rumours are almost invariably more damaging than reality. While some chief education officers and LEAs consider that providing the general public with information prior to decisions may lead to misuse of the data as well as possible 'planning blight' on those schools perceived to be threatened, the Commission believes that there are considerable advantages to an open, staged approach. For example:

- releasing a discussion paper outlining the problem and the costs of doing nothing;
- holding a series of local meetings at which those interviewed are invited to put forward options for dealing with the situation;
- publishing the decision criteria before any detailed options are developed;
- publishing the full range of options with the cost and educational implications spelled out for discussion at local meetings before the LEA has decided what course to adopt.

(d) incentives to encourage the acceptance of the changes. In about one half of the sample LEAs, at least a share (e.g. 30 per cent) of the capital receipts from the disposal of surplus buildings is given back to the education committee, whereas in the other LEAs capital receipts go into a central "pool" and are lost to the education committee.

(e) diversion to alternative uses of the whole or large parts of schools is fairly common e.g. use by further education, day centres for the elderly, magistrates court accommodation. But the associated costs which are incurred as a result need to be quantified (including the opportunity cost) so that members are aware of the costs of their decisions. The DES Architects and Buildings Group has published a number of useful broadsheets on the alternative use of school buildings.

Stage Four: Follow-up and Review

42. Most LEAs do not follow up implementation to check that the intended costs and benefits did accrue. Consideration of the effects of past decisions can improve future appraisals as well as current management performance. Politically an authority may not wish to question the validity of past decisions; but for management purposes, knowledge of the success or failure of past projects is vital. This process was not in evidence in some of the LEAs visited. For instance, some sample LEAs were not comparing their actual performance in taking places out of use with their plans in their response to DES Circular 2/81.

ACTION BY CENTRAL GOVERNMENT

43. As stated above, the local consultation process on secondary school reorganisations is long and time consuming. Once the local authority has completed the statutory consultation process, the decision has to be referred to the Secretary of State for Education for approval before it can be implemented. Exhibit 6 shows the process for a particular secondary
school in Cleveland; it is by no means untypical in terms of the number of steps involved and the time that elapsed.

44. The Education Acts of 1944 and 1980 require the Secretary of State to decide between the interests of objectors to reorganisation proposals and those of the local ratepayers as represented by the LEA. It is, clearly, not for the Commission to challenge the Law. But it does have a responsibility to draw attention to the difficulties that arise as a result of the requirements of the Education Acts. The consequences of the Secretary of State turning down reorganisation proposals are serious. Directly, the LEA will incur those educational and financial costs if it is seeking to avoid - even though the GRE mechanism assumes that the places will be taken out of use. Indirectly, those LEAs which have proposals turned down face considerable local political embarrassment; and, not surprisingly, they will probably be less willing to run similar risks in future and will be tempted to avoid confronting the very problem the Secretary of State is urging them to tackle.

45. The implications of the Secretary of State being forced to turn down proposals for secondary school reorganisation are also not very pleasant. Rejection of proposals can be taken as a signal that the LEA concerned is considered incompetent e.g. to assess 'proven educational worth' and that Ministers and officials in London know better what is good for the local people.

46. It follows that if the Government wish to see the difficult problem of falling rolls tackled resolutely, reorganisation proposals should only be turned down in the most exceptional circumstances and then only for stated reasons which will help to avoid the LEA making a similar "error" in the future. A turn-down rate of more than, say, one in fifteen is likely to be very damaging - even this implies eight LEAs with a "bloody nose" every year.

47. Despite the publication by DES of three circulars (2/80, 2/81 and 4/82) and an Administration Memorandum (4/84) to help LEAs formulate sound reorganisation schemes that will meet with the approval of the Secretary of State, the rate at which proposals are brought forward is below the 90–120 closures a year implied by the modest target of taking (only) two out of every five surplus places out of use. Furthermore, as the Commission observed in its report on the Impact on Local Authorities' Economy, Efficiency and Effectiveness of the Present Block Grant Distribution System, it is by no means exceptional for proposals to be turned down at present. Table 4 provides the details.

Table 4: SECRETARY OF STATES DECISIONS ON REORGANISATION PROPOSALS
% school closures

<table>
<thead>
<tr>
<th></th>
<th>Approved</th>
<th>Modified</th>
<th>Rejected</th>
<th>Number of schools considered</th>
</tr>
</thead>
<tbody>
<tr>
<td>1982</td>
<td>79%</td>
<td>7</td>
<td>14</td>
<td>81</td>
</tr>
<tr>
<td>1983</td>
<td>64%</td>
<td>7</td>
<td>29</td>
<td>89</td>
</tr>
<tr>
<td>1984 (to Aug 31)</td>
<td>74%</td>
<td>15</td>
<td>11</td>
<td>46</td>
</tr>
</tbody>
</table>

It thus appears that, despite the circulars and the readiness of DES officials to discuss proposals when they are in the draft stage, LEAs are still submitting schemes unacceptable to the Secretary of State. In part this may reflect the lack of clear and consistent criteria against which reorganisation proposals will be evaluated. For example:
- Circular 2/81 states (paragraph 15) that 'it is not acceptable at a time of constraints on expenditure to retain accommodation which is not strictly required';
- The same circular sets out implied educational criteria, based on the number of forms of entry for different types of school;
- Circular 4/82 states that proposals will not normally be approved if they have as their consequence the closure or significant change of character of schools which, by a sustained record of successes in the provision they make for sixth-form education, have already proved their worth;
- This circular also states that proposals should have particular regard to parental preference, on religious or other grounds, for maintaining opportunities for the education of pupils in single-sex schools.

These criteria are not invariably mutually consistent: parental preference often conflicts with educational requirements; preservation of schools of 'proven worth' often involves retention of accommodation that is not strictly required as well as sub-optimal (from an educational point of view) numbers of forms of entry. And so on. The circulars give no guidance as to the relative importance that the Secretary of State attaches to the various criteria.

48. Unless authorities have greater confidence that future proposals for reorganisation will be accepted by the Secretary of State, they will naturally be reluctant to come forward with proposals - fearing more embarrassment. Indeed, this is one interpretation of Table 4 above. The high rejection rate in 1983 was followed by a marked fall, of perhaps 20–25 per cent, in the number of proposals submitted in 1984 to the end of August. As a result, despite the Secretary of State's determination to see an acceleration of closures (Circular 2/81, paragraph 4), the pace may well continue to lag. It would be helpful to LEAs if DES published a comprehensive list of the criteria that will be used to evaluate reorganisation proposals, with an explanation of how they will be applied (for example how is "parental preference" or "proven educational worth" to be assessed and by whom?). LEAs would also find it helpful to know the relative importance that will be attached to the various factors. It would further be valuable guidance for authorities if, whenever proposals are rejected or modified, a fairly detailed statement of the reasons could be made available.

49. Finally, the capital expenditure implications of secondary school reorganisation need to be taken into account in central government's capital allocations to individual LEAs. In 1983–4, local authorities collectively requested £580 million to meet their capital spending needs for education as they saw them. In response to this bid, allocations of £220 million and £74 million were made for schools and further education respectively - a shortfall of almost exactly 50 per cent. Fieldwork in ten LEAs, in connection with the Commission's present study on the local effect of capital expenditure controls, suggest that the gap between bids and allocations has widened recently.

* * *

In summary, the Commission considers that the problem of adjusting school capacity as rolls fall deserves priority attention from all LEAs – attention that, in general, it is not now receiving because the political risks involved at the local level are usually perceived to be greater than the educational and financial benefits likely to flow from the reorganisation. The perceived risks are if anything increased if proposals are regularly turned down by the Secretary of State. But the cost of failure to act - in terms of the quality of education, not to mention some £100 -200m per annum of public funds pre-empted from other important uses - are high. The Commission will therefore be asking all its auditors next year to review the extent to which each LEA is grappling with the problem in a systematic and resolute manner.
2 Securing Better Value from Non-Teaching Costs

50. Obviously, tailoring secondary school capacity more closely to demand will serve to reduce non-teaching costs, since redundant buildings will not need to be staffed, operated and maintained. However, the study also suggests that there are opportunities to secure better value from non-teaching costs in schools that will continue in use, by:

(i) Improving maintenance effectiveness
(ii) Reducing cleaning costs
(iii) Increasing delegation to schools, to improve local management control.

The second part of this report describes each of these opportunities in turn.

51. The Commission has observed that many authorities have responded to financial pressures by reducing maintenance expenditure on their schools. While in some instances economies may be possible without adverse effects on buildings, this is not universally true. Too often, economies in maintenance lead to a deterioration in the capital stock and to higher expenditure later - in other words to higher life-time costs for the authority. A distinction between day-to-day and routine maintenance is particularly appropriate in such circumstances. If overall expenditure on maintenance is reduced, routine maintenance is likely to suffer first.

52. Unfortunately there is little that can be said in the current state of knowledge about the best long-term volume of and balance between routine and day-to-day (i.e. response) maintenance. Some expert subjective views are mentioned later in this section and are set out in a useful discussion paper produced recently by the Architects and Building Group of the Department of Education and Science*.

53. When the question of efficiency in day-to-day maintenance is addressed it becomes clear that hard conclusions would require a comparison of costs of a wide range of carefully defined jobs (e.g. window repairs) carried out by a variety of means. Such comparisons, although desirable, are fraught with difficulties and could not possibly be undertaken in a study of this nature. The Commission will consider whether a detailed comparison is feasible and worthwhile in the future. Meanwhile this section deals with:

(i) the level and balance of expenditure on maintenance - in general more investment appears necessary on longer term maintenance.
(ii) the steps required to improve day-to-day maintenance performance.

54. Day-to-day maintenance is defined, for the purposes of this study, as:- "repairs to school buildings, fences, playgrounds, fixtures and fittings, and furniture and equipment that become necessary because of a breakage, whether accidental or deliberate, or because of deterioration through age or neglect to the point where a repair has to be immediately undertaken". It

Exhibit 7

SCHOOL MAINTENANCE EXPENDITURE
£/m² committed, adjusted for inflation

excludes all regular servicing, even if repair work is undertaken as part of that servicing, and also excludes redecoration (except for making good after a repair) and improvements.

55. The 104 LEAs in England and Wales spend in total about £180 million on repairing and maintaining secondary school buildings and grounds. This is on average equivalent to £38,000 per school and £46 per pupil. There are bound to be variations and these are illustrated in the table below.

Table 5: REPAIRS AND MAINTENANCE INCLUDING GROUNDS - ANNUAL COST

<table>
<thead>
<tr>
<th></th>
<th>All LEAs in England and Wales</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Per Pupil £</td>
</tr>
<tr>
<td>ILEA*</td>
<td>78</td>
</tr>
<tr>
<td>London boroughs*</td>
<td>48</td>
</tr>
<tr>
<td>Metropolitan districts</td>
<td>39</td>
</tr>
<tr>
<td>English counties</td>
<td>45</td>
</tr>
<tr>
<td>Welsh counties</td>
<td>42</td>
</tr>
<tr>
<td>All LEAs</td>
<td>46</td>
</tr>
</tbody>
</table>


* London costs have been reduced by 17% to reflect London Weighting.

About 50% of this figure, approximately £90 million, is estimated to be spent on day-to-day maintenance. Care must be taken when making comparisons between LEAs because there is no standard definition in use for day-to-day maintenance. National statistics are collected only at the level of total expenditure on repair and maintenance.

56. Taken in isolation, the figures in the table are only relevant if the effectiveness of maintenance in different types of authority is comparable and the mix of buildings is similar. However, this study suggests that there are grounds for concern both about the level of maintenance expenditure and also the balance between longer term and day-to-day work.

57. There is no objective measurement of the appropriate level of maintenance - only the subjective views of building surveyors based on a detailed survey of individual buildings. Exhibit 7 shows that maintenance expenditure per square metre has risen since 1980; but even so current levels of expenditure are regarded by local authority architects as some 30 per cent below those desirable. In general their view is that standards are unsatisfactory. The low level of preventative maintenance is visibly causing buildings to deteriorate and will inevitably lead to an increase in essential repair work in the future. Redecoration in particular has suffered: many authorities have not redecorated their schools internally for nearly 10 years; and in one authority the current level of redecoration means that schools will only be redecorated once every 50 years.

58. A similar view is expressed in the Report by Her Majesty's Inspectors on the Effects of Local Authority Expenditure Policies on Education Provision in England – 1983:

"All in all, the state of much of the school building stock is already a cause for concern and the situation is apparently worsening. The planned programme of maintenance in schools was judged to be less than satisfactory or poor in 59 LEAs, compared with 69 in 1982–83, though as yet this improvement was not showing itself in schools visited during the Autumn term 1983. Thirteen LEAs have an acknowledged serious backlog of work arising from several years of neglect and in at least three of them the backlog is increasing . . . Specific deficiences or maintenance problems included leaking roofs which affect some schools in almost one third of all LEAs. In four LEAs reference was made to problems with buildings containing asbestos. The long term consequences of this neglect
**TARGET MAINTENANCE CYCLES IN HOSPITALS**

Years

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>ROUTINE MAINTENANCE</th>
<th>REPLACEMENT</th>
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<td><strong>ROOF COVERINGS</strong></td>
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</tr>
<tr>
<td>Felt</td>
<td>3.4</td>
<td>16</td>
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<td>Slate</td>
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<td><strong>WALLS</strong></td>
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<td>Timber-clad</td>
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<td><strong>WINDOWS</strong></td>
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<td><strong>MISCELLANEOUS</strong></td>
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<tr>
<td>Cast-iron pipes</td>
<td>15</td>
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</tr>
<tr>
<td>Drains</td>
<td>1.1</td>
<td>93</td>
</tr>
<tr>
<td>Fire escapes</td>
<td>1.7</td>
<td>58</td>
</tr>
<tr>
<td><strong>FLOOR COVERINGS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carpet</td>
<td>3.5</td>
<td>9</td>
</tr>
<tr>
<td>Vinyl</td>
<td>5.8</td>
<td>16</td>
</tr>
<tr>
<td>Terrazzo</td>
<td>9.5</td>
<td>61</td>
</tr>
<tr>
<td>Quarry tile</td>
<td>6.7</td>
<td>53</td>
</tr>
<tr>
<td>Wood block</td>
<td>5.1</td>
<td>44</td>
</tr>
<tr>
<td><strong>WALLS AND CEILINGS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plaster</td>
<td>3.9*</td>
<td>77</td>
</tr>
<tr>
<td>Plasterboard</td>
<td>4*</td>
<td>56</td>
</tr>
<tr>
<td><strong>JOINERY</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doors</td>
<td>6J</td>
<td>48</td>
</tr>
<tr>
<td>Screens</td>
<td>7.7</td>
<td>51</td>
</tr>
</tbody>
</table>

* Target repainting cycles for wards and corridors was 5-6 years (depends on the finish, eg. gloss, eggshell or emulsion)

Source: Hospital Building Maintenance, LGORU 1972
are serious in themselves and observations of work in schools show clearly the adverse effect of poor or unsuitable accommodation on the quality of work as well as the schools' capacity to respond to the need for change and improvement”.

59. Very few of the sample LEAs had constructed detailed and reasoned budgets of the expenditure that would be necessary to repair, maintain and redecorate schools to defined standards. This was explained to be a result of acceptance that sufficient funds would not be available and so it was thought that detailed definition of requirements would not be useful. As a result local members are not equipped with soundly based evidence of the extent of the maintenance shortfall; and it is difficult to set priorities among maintenance tasks.

60. One sample LEA estimates total annual expenditure on required maintenance work as 1.8 per cent of the insured value of its properties. This percentage is in line with levels recommended by the Royal Institute of Chartered Surveyors. On this basis and assuming a current replacement cost of an average secondary school as £2.25 million (which is in line with average construction costs quoted by the DES) the LEA then estimates that about £40,000 per annum should be spent on each school, equivalent to £45 per pupil. This compared with current average expenditure in that LEA of £27,000 per school or £30 per pupil. (Both figures exclude grounds; so comparisons with the information in Table 5 are inappropriate).

61. On this basis increases in maintenance expenditure of 30–50 per cent would be necessary. A major difficulty with such a calculation, however, is that there is a fundamental lack of data on building stock available to LEAs. In particular, individual LEAs have reported their inability to provide reliable figures for floor areas, types of construction and age and state of property. All accept the need for a comprehensive register for all council property which would include such basic data. The scale of the general problem - with some council houses being demolished well under half-way through their economic life due to poor maintenance - is such that the frequent claim that staffing constraints prevent authorities maintaining a comprehensive property register including schools is simply not acceptable. Ways must be found for registers to be set up as a matter of urgency wherever they are not in place now, if necessary by redeploying staff from less urgent tasks.

62. It might be expected that some indication of appropriate levels of total maintenance expenditure could be obtained from whole-life studies of buildings which determine the optimal trade-off between maintenance costs and replacement costs. Clearly such studies are fraught with difficulties because of the extensive historical information required; and it appears that there is little in the way of succinct and easily-understood conclusions. A 1972 study Hospital and Building Maintenance by the Local Government Operational Research Unit (LGORU) could not, in practical terms, establish on the basis of information then available an optimal trade-off for building elements as a whole.

63. Work by LGORU did, however demonstrate an optimal strategy for some building elements. For example it showed that the repainting of external softwood window frames should take place every five years, and this cycle time is precisely that arrived at in a survey undertaken by the Society of Chief Architects of Local Authorities (SCALA) for the Commission. Exhibit 8 shows target routine maintenance and replacement cycles in hospitals drawn from the LGORU study. Again the five-year painting cycle appears. It is perhaps worth noting that many schools are of an age where at least some of the elements will be 'due' for replacement - 40 per cent of school building stock (by area) was built in the period 1945 -1965; and 15 per cent was constructed before 1945.
Exhibit 9

The age of schools is reflected in day-to-day maintenance costs

DAY-TO-DAY MAINTENANCE COSTS

£/m² – 1983

Source: Analysis of records of 140 sample schools
64. A survey was carried out for the Audit Commission by SCALA into five areas of routine maintenance. The table below shows the results. With the exception of electrical rewiring, more LEAs are failing to achieve their intended maintenance levels than are doing so. It again indicates that, in general, schools are under maintained.

Table 6: ACHIEVEMENT OF INTENDED MAINTENANCE LEVELS, 1984

<table>
<thead>
<tr>
<th></th>
<th>Achieving</th>
<th>Not Achieving</th>
</tr>
</thead>
<tbody>
<tr>
<td>External repainting</td>
<td>20</td>
<td>29</td>
</tr>
<tr>
<td>Flat roof maintenance</td>
<td>13</td>
<td>17</td>
</tr>
<tr>
<td>Electrical rewiring</td>
<td>29</td>
<td>21</td>
</tr>
<tr>
<td>Boiler renewals</td>
<td>17</td>
<td>34</td>
</tr>
<tr>
<td>Resurfacing paved areas</td>
<td>12</td>
<td>38</td>
</tr>
</tbody>
</table>

Source: SCALA survey of LEAs carried out for the Commission.

It is particularly disturbing that flat roofs, which are well known as sources of maintenance difficulties and often leak, are not being adequately maintained in the majority of LEAs at present.

65. An overview of total expenditure is obtained by analysing it between routine and day-to-day maintenance. The overall indicator of day-to-day maintenance is the cost per square metre of floor space. Table 7 summarises the results obtained in the sample schools:

Table 7: DAY-TO-DAY MAINTENANCE COSTS

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Lower Quartile</th>
<th>Median</th>
<th>Upper Quartile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual day-to-day maintenance cost per pupil (£)</td>
<td>18.78</td>
<td>9.32</td>
<td>15.17</td>
<td>21.79</td>
</tr>
<tr>
<td>Annual cost per square metre of floor space (£)</td>
<td>2.36</td>
<td>1.26</td>
<td>1.92</td>
<td>2.86</td>
</tr>
<tr>
<td>Floor space per pupil (m²)</td>
<td>8.04</td>
<td>7.00</td>
<td>7.74</td>
<td>8.72</td>
</tr>
</tbody>
</table>

66. Table 7 shows the considerable variations between schools. However it is not possible to say what is an optimum figure for this indicator since the incidence of expenditure on any one school varies with factors such as the level of accidental or deliberate damage and the condition of the building. This is in part related to age as Exhibit 9 shows; but newer buildings, particularly those built in the 1960s, have deteriorated significantly because of the use of low cost construction materials. The method of carrying out work can also affect costs. Evidence gathered from the sample LEAs suggests that outside contractors are cheaper; but it is by no means conclusive. More conclusive evidence would require cost comparisons of a wide range of closely defined jobs as between outside contractors and DLOs and as between different LEAs.*

67. Regular or planned maintenance is likely to prevent deterioration of property and so reduce the need for repair work. All but one of our sample LEAs could analyse their total maintenance expenditure between day-to-day and programmed maintenance, although only a few regularly reported this analysis. Such reporting does highlight how much an authority is spending on these two areas and is therefore useful in helping an authority to understand its spending and what can be done to control - or reduce - it.

Of the 11 sample LEAs most spent between 60–70 per cent of their total building maintenance funds on day-to-day maintenance and only 30–40 per cent on programmed maintenance. This is in marked contrast to the DES Architects and Building Group suggestions to the Expenditure Steering Group (Education) that only 35 per cent should be on day-to-day maintenance and 65 per cent on programmed work.

* Information for these comparisons is now being collected by the Commission, in its current study of council house maintenance.
Exhibit 10

COSTS OF PAINTING EXPOSED SOFTWOOD JOINERY OVER 20 YEARS

1970 prices

Source: How Often Should You Paint?, LGORU 1970
68. The imbalance in favour of day-to-day maintenance was mainly attributed to the fact that insufficient funds were being spent on total maintenance and that as repair work simply had to be done it was planned maintenance that had to be reduced. This supports the argument on increased levels of expenditure in paragraphs 58–61 above. A change in balance from 40 per cent programmed maintenance to 60 per cent could lead to an immediate increase in expenditure on total building maintenance of 50 per cent - the increase implied by the SCALA survey referred to earlier is 44 per cent. However, the eventual increase in expenditure may be much less, since more routine maintenance will reduce the need for response maintenance. This comparison is based on revenue expenditure. An initial assumption was made that maintenance would be wholly charged to revenue. In a number of LEAs, however, at least some of the expenditure on programmed maintenance is being capitalised. This appears to be a short-term response by the LEAs towards meeting their expenditure targets, set by the Government for grant purposes. Authorities and their auditors will want to ensure that changes in accounting treatment are not allowed to mask underlying realities about the level and balance of maintenance activity.

69. Given these circumstances it is unrealistic without further information to seek a statistical relationship between the total maintenance spend and the relative magnitudes of the two principal components. A specialist study by professionals in the building field would be required to establish whether a low level of programmed maintenance leads to higher overall maintenance costs in the long term. Exhibit 10 shows the sort of analysis that needs to be done for all major maintenance tasks.

70. Maintenance work is executed either by a direct labour organisation (DLO) or private contractors. DLOs were responsible for nearly all of the work in three of the sample metropolitan districts and 80 per cent of the work in the other. Private contractors, on the other hand undertook nearly all the work in the three London boroughs and four of the non-metropolitan counties. In the fifth non-metropolitan county, private contractors were responsible for all work except for one large urban area where a DLO undertook it.

71. Education officers in the sample authorities were, with one exception, satisfied with the provision of the service by private contractors, given the financial constraints within which the budget was completed. Co-operation between departments appears to be good in these authorities. However dissatisfaction with the performance of the DLO was common within education departments for a number of reasons: poor quality of work done, poor response times, lack of education department influence over the expenditure incurred and suspicion as to the true competitiveness of the DLO.

72. This study suggests the following requirements for responsive day-to-day maintenance:

(i) Clear assignment of responsibility for maintenance of individual schools within the property organisation; and regular, effective communication between the surveyor concerned and local staffs.
(ii) Effective preventive measures, to minimise maintenance requests.
(iii) Use of mobile workteams and computer scheduling to improve response times.
(iv) Better follow-up of maintenance work, to see that it has been done properly.
(v) Tighter financial control.
73. Work orders from schools are either telephoned (for emergency work) or sent in writing to a technical officer, normally a building surveyor. Sometimes the orders are sent via an area education office (in counties) or an education department schools buildings section (in metropolitan districts and London boroughs). The management contribution of these education intermediaries is not clear. It appears to lead to duplication of paperwork and more cumbersome administrative procedures. In addition, the lines of responsibility and accountability become blurred.

74. Maintenance work should be the clearly defined responsibility of either the education department or the technical department. The overriding requirement either way is that the responsible officers have both technical expertise and knowledge of the particular needs and priorities of schools. In all the sample LEAs the arrangement preferred by schools was where building surveyors were responsible for a group of schools, visited them regularly, and built up a good working relationship with a nominated liaison officer at each school. This was so regardless of whether the work was undertaken by DLOs or private contractors.

75. The worst service, as perceived by both head teachers and education department officers, was found in a metropolitan district LEA with a DLO where no such responsibility exists. It can be contrasted with another metropolitan district, also with a DLO, which is not spending any more on maintenance but where the service is perceived to be much better. In that LEA the arrangement is that building surveyors are given individual responsibility for groups of schools.

76. The most obvious means to reduce day-to-day maintenance expenditure is by prevention of damage to buildings. Head teachers are convinced that the deterioration in the appearance and state of the buildings encourages carelessness and vandalism. This may be so; but objective evidence has not been found. Indeed, only seven of the sample LEAs could produce any information on the cost of vandalism and even this information is uncertain because of problems of definition and recording. The average annual cost per school is reported to be about £1,800 but there are wide variations from nothing to over £5,000.

77. Some LEAs report that preventive measures have been successful and have resulted in lower insurance premiums. One northern authority claims to have persuaded all significant local retailers of spray paint to stock and display the product where it is less easy for potential vandals to reach; all schools have burglar alarms fitted; there is round-the-clock response to any alarm calls indicating unauthorised entry; and wherever problems occur, they "clear up the mess before school opens the next day, so that no one would know".

78. In addition to preventive measures, a do-it-yourself approach can also reduce demand for maintenance requests from the central organisation concerned. In at least two LEAs a caretaker/handyperson scheme has been introduced. The caretaker is issued with a standard tool-kit and is responsible for a clearly defined body of repair/maintenance work. Extra payment is received for the responsibility and first line control is exercised by the local building surveyor, who inspects the work and is empowered to suspend the extra payment in the event of regularly poor workmanship. The scheme is popular among head teachers and caretakers, although the technical officers consider that there is scope for improvement in its operation.

79. The list of jobs included in the scheme are precisely those minor jobs which do not merit a special visit from a tradesman, yet whose non-completion causes frustration. Examples include: door handle repairs,
shelving, repair of desks, repair of lock fittings, temporary boarding of broken windows and removal of dangerous glass, tap washer replacement, adjustment of overflows, repairs to school equipment.

80. The financial savings from such schemes can be summarised as follows. The caretaker/handyman is already on site, therefore saving on the travelling time included in both DLO and contractors' costs; this can be estimated at £7 per hour at least. There is considerably less administration (and therefore cost) as no ordering, invoicing or payment is required for labour; inspection is done by the building surveyor on routine visits. Finally the operation itself is considerably cheaper, since there is no overhead loading or profit element. Efficiency may be lower through lack of expertise (though this is debatable); but a programme of training would help to remedy this.

81. Response times to requests for work were reported to be poor particularly where DLOs provided the service. Head teachers regularly complained that it took too long to carry out priority repairs and that the planning of particular jobs was often poor, with the phasing of input of particular skills being badly co-ordinated. However, this is not invariably the case. Authorities have taken steps such as the following to improve response times:

(a) setting target response times for particular maintenance requests (e.g. 24 hours service for re-glazing) and monitoring performance against them. Most LEAs in the sample did not have clearly laid down response times for individual maintenance jobs. However, where these are available, performance appears better. In one London borough there is a quarterly report to members summarising response time for individual schools; the basis for the information is the level of complaints as recorded in individual schools' governors' minutes.

(b) adopting a computerised priority ranking system to load school maintenance gangs, such as is often used in authorities' housing departments in responding to householders' requests for maintenance and repairs.

(c) seconding building inspectors to the education department to improve the links between schools and depot supervisers in technical departments.

(d) setting up mobile maintenance teams under the control of the education department to complete smaller jobs now undertaken by the technical department. The advantages claimed for such a team are direct and speedy response; avoidance of problems of recharge; better programming of work on a school or area level; and better value for money. Examples of costings of particular jobs show considerable savings from technical department equivalents, with 50% being an attainable figure.

82. Contractors' invoices are generally certified, and then passed for payment by the building surveyors. The percentage of jobs inspected prior to the invoices being paid varied considerably between LEAs - somewhere between 30 and 50 per cent of all jobs being claimed. Where building surveyors visit schools on a regular basis, say every two to three weeks, then they are at least able to carry out a post-payment check on nearly all jobs. In one county LEA the checks by divisional building surveyors are supplemented by a random "audit" carried out by senior surveyors of a job, the contractors' invoices, and the contractors' prime supporting documents.

83. This study suggests that there is a strong case for subjecting work done by DLOs to similar independent scrutiny. Head teachers interviewed
during the study were often critical of the quality of work done by the local DLOs. In one authority almost 30 per cent of the completed jobs were the subject of complaints. Certification of jobs completed by DLOs is generally not required. Expenditure is usually charged against the job on the basis of the completed job ticket being returned by the direct labour operative. Typically, no more than 10 per cent of jobs would be checked. Moreover, the value of the checking done by supervisors is obviously doubtful if their bonus pay is linked to that of the operatives whose work is being checked.

84. *The Local Government Planning and Land Act* of 1980 required local authorities to keep separate accounts of work done by DLOs; and subsequent statutory instruments have set out rules governing work which must go out to competitive tender. Complying with the requirements of legislation is certainly an essential first step to securing effective financial control over maintenance expenditure. But it is not sufficient. This study suggests that additional measures are required, including the following:

(a) the maintenance budget for each school should be discussed and agreed at least with the education department and ideally with the head teacher concerned even if (as in nine of the 12 sample authorities) responsibility for the maintenance budget is exercised by the property function. The rationale for a corporate approach to the management of property is sound in principle; but education officers and head teachers complain that they lack influence over the ranking of priorities - and feel frustrated as a result.

(b) put work out to tender in a manner designed to attract competitive bids. Surprisingly, practices in a number of the sample authorities inhibited the LEA in obtaining good value for money:–

- One LEA treats the total day-to-day maintenance work of the authority (worth some £17 million-18 million per annum) as one job, for which tenders are invited. There are few contractors who can take on such a large operation, renewable annually, and the DLO is in an advantageous position when entering a tender. The contractors who are large enough to cope with all day-to-day maintenance may not always be the most appropriate.

- In two of the sample LEAs, private contractors were not given details of expected volumes of work across individual categories and could not, therefore, price their tenders according to the "mix" of work. A more competitive situation is likely to arise if the contract were split by trades or by geographical area.

- Two LEAs do not include day-to-day maintenance of schools within that percentage of work which must go out to competitive tender.

(c) agree schedules of rates for particular routine maintenance jobs. Management information on the price competitiveness of DLOs is inadequate in all the sample LEAs; and it has not been possible to establish the price competitiveness of DLOs with private contractors on schools' maintenance. Orders for work are frequently issued on a day-works basis (i.e. time and materials); so there is effectively no limit on the price that can be charged and control is very difficult. The most effective way both of comparing costs and controlling them is to agree a schedule of rates which specifies the cost of defined tasks e.g. replacing window panes. Three of the sample LEAs are making good progress in this direction.

(d) provide monthly reports showing expenditure against budget. In the sample LEAs with DLOs, the education department officers criticised the inadequacy of information. Expenditure is typically
charged against the education budget in monthly totals for individual schools and it is impossible to identify the costs of individual jobs. At minimum, expenditure should be classified into glazing, plumbing, electrical and mechanical and roof leaks. In addition expenditure on each category should be shown for individual schools. None of the sample LEAs had even a limited analysis of expenditure for monitoring and control purposes.

(e) install sound budgetary control arrangements. Formal budgetary control is on a commitment basis in most cases. One LEA had implemented a computer based system, operated by divisional surveyors through terminals in their offices. It was said to have achieved a high degree of effectiveness, with a £30,000 variance on outturn of a budget for all maintenance of £6 million in 1982–83.

85. Particularly when day-to-day maintenance is carried out by DLOs, failure to install adequate controls along the lines set out above can have unfortunate consequences. In the four LEAs with DLOs the education department is nominally responsible for the day-to-day maintenance budget; but in practice the expenditure is controlled by the DLO. In one case the budget was thought to be 10 per cent underspent last year; in the others serious problems were encountered in remaining within estimate, which were resolved by a moratorium by the DLO on work done for the department. This causes frustration within education departments, since they have inadequate management information on the completion and cost of individual jobs and future commitments.

* * *

In short, most LEAs should be devoting more resources to maintaining schools in a sound structural condition. But there are often opportunities both to reduce the need for day-to-day maintenance and also to increase the efficiency of maintenance operations.

REDUCING SCHOOLS’ CLEANING COSTS

86. The equivalent of some 39,000 full-time employees are engaged in the cleaning and caretaking of secondary schools in England and Wales. The annual expenditure is at present running around £190 million. As Table 8 below shows, there is a large difference in caretaking and cleaning staff costs per pupil - the only performance related figure available for all LEAs. Of course, these figures are only a starting point since costs per pupil are influenced by school utilisation - i.e. square metres per pupil - as well as by local conditions.

<table>
<thead>
<tr>
<th></th>
<th>Annual Spend</th>
<th>Costs per Pupil</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
<td>Average</td>
</tr>
<tr>
<td>ILEA</td>
<td>£17m</td>
<td>£126</td>
</tr>
<tr>
<td>London boroughs</td>
<td>20</td>
<td>64</td>
</tr>
<tr>
<td>Metropolitan districts</td>
<td>47</td>
<td>48</td>
</tr>
<tr>
<td>Non-metropolitan counties</td>
<td>103</td>
<td>41</td>
</tr>
</tbody>
</table>

Source: CIPFA statistics

87. This chapter discusses in turn two requirements for reducing cleaning costs without compromising quality standards: monitoring service performance accurately and improving cleaners’ productivity.
88. There is no objective measurement of the effectiveness of cleaning operations and the resulting cleanliness of a school. Assessments of effectiveness have to be based on the subjective views of teachers and other clients of the service. In the 12 authorities visited these people are in general satisfied with the cleanliness of schools cleaned by LEA staff. Complaints have been received from schools cleaned by outside contractors; but these may be caused by teething problems.

89. Schedules of frequency of particular cleaning tasks can provide intermediate measures of effectiveness if it can be assumed that the tasks themselves are properly monitored for quality. Some LEAs following provincial council formulae maintain such schedules, as do most productivity schemes. Amongst the sample LEAs there were disparities not only in the frequency of cleaning but also in the number of tasks on the schedules.

90. The key indicator of cleaning service performance is therefore the actual cost per square metre of floor space. In the absence of complaints about cleanliness, the lower the cost per square metre on a sustained basis, the better. It is a more relevant measure than cost per pupil which is dependent not only on the cost of cleaning but also on the floor space per pupil - an indicator of the level of occupancy of buildings. The relationship between these indicators is as follows:

\[
\text{Annual cost/pupil} = \frac{\text{Costs/m}^2}{\text{m}^2/\text{pupil}} \times \left( \text{Materials/m}^2 + \frac{\text{Cost/Employee} \times \text{m}^2/\text{Employee}}{} \right)
\]

It applies nationwide and to single authorities as well as to individual schools. Cruder measures such as costs per room are not reliable alternative measures of performance because of the problems of definition and varying size of rooms.

91. Some LEAs do not collect information on floor areas, hours worked by employees, and costs for individual schools. Given that up-to-date data is the basis for determining staffing levels, this is a serious deficiency. Similarly, up-to-date information on the actual costs and hours being worked by employees at individual schools compared with plan should be an essential feature of sound budgetary control.

92. Table 9 below shows that within the 140 sample schools in the LEAs examined, there are wide variations in cost per square metre.

<table>
<thead>
<tr>
<th>Table 9: COST PER SQUARE METRE</th>
</tr>
</thead>
<tbody>
<tr>
<td>£, FY 1984</td>
</tr>
<tr>
<td>Lower quartile</td>
</tr>
<tr>
<td>Median</td>
</tr>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>Upper quartile</td>
</tr>
</tbody>
</table>

Within the sample of 140 schools savings of over 25 per cent could be achieved if the mean cost per square metre for all schools could be brought down to the mean of the best 35 schools. If this sample is typical nationally the potential annual saving approaches £50 million.

93. Of course, part of the variation can be explained by differences in management style in individual schools, e.g. the extent to which teachers insist on good housekeeping and take action to prevent litter and unnecessary mess. The type and use of school buildings also influence costs. For example: the nature of the floor and wall surfaces (e.g. carpeted areas); the amount of extra curricular or community use; the amount and type of furniture; the age of buildings; the amount of accommodation for practical studies and its level of use; the number and type of toilets; and split site or
Improving Productivity

94. Experience of LEAs visited in the course of study is that productivity gains are possible from a combination of:

(i) modifying or updating the formulae for cleaning assistance in provincial agreements;
(ii) introducing productivity schemes based on a target of, say, 33 square metres per cleaning hour (350 square feet per hour);
(iii) using caretakers’ time more profitably than on cleaning tasks;
(iv) providing cleaners with appropriate materials and modern equipment.

Each of these possible initiatives is discussed in more detail below.

95. Employees involved in cleaning are categorised as caretakers, assistant caretakers and cleaners. Caretakers and assistant caretakers are mostly men and full-time, the cleaners are mostly women and part-time. Caretakers are responsible for overall supervision of cleaning and they undertake some cleaning themselves. Other duties include security, heating and lighting, porterage and miscellaneous duties related to the buildings. This report does not discuss these other duties. A national agreement stipulates that there must be a full-time (39 hours per week) caretaker in all schools of 10,000 square feet (or 930 square metres) and above. Assistant caretakers are employed at larger secondary schools to undertake caretaking duties, including cleaning, as decided by the LEA and under the supervision of the caretakers.

96. Conditions of service for school caretakers and cleaners are negotiated at three levels:

(i) the national scheme negotiated by the National Joint Council for Local Authorities Services (Manual Workers) – which determines rates of pay (but not earnings) and the major conditions of service, e.g. the standard working week, sick pay, superannuation and holiday pay entitlements;
(ii) the provincial level negotiated by the 14 provincial councils - which expand upon or clarify points within the national scheme and, in particular (nine of the 14 agreements) specify the levels of cleaning assistance to be provided to caretakers; and
(iii) the local level negotiated by individual LEAs - which expand upon or clarify the national or provincial agreements, or cover local circumstances particular to individual LEAs. All productivity and bonus schemes are entirely local agreements.

There is nothing within the national or provincial agreements which constrains LEAs from negotiating bonus schemes or other productivity improvements.

97. With the pressure on LEAs to achieve cost savings in all areas of their activities many have sought lower costs and more efficient methods of achieving their required standards of cleanliness. A number of the provincial council agreements have been withdrawn, suspended or ignored by LEAs insofar as they specify the level of cleaning assistance. They have been replaced by local schemes.

98. Provincial council formulae are still used by many LEAs, including five of the 12 sample ones, to determine the level of cleaning assistance. As
Exhibit 11

Cleaning allowances in provincial agreements, vary widely

ALLOWANCE FOR CLEANING A SCHOOL OF 7600 M$^2$

Cleaner hours per week

<table>
<thead>
<tr>
<th>Region</th>
<th>Cleaner Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NORTH WALES</td>
<td>460 hours</td>
</tr>
<tr>
<td>WEST MIDLANDS</td>
<td>420</td>
</tr>
<tr>
<td>SOUTH WALES</td>
<td>420</td>
</tr>
<tr>
<td>NORTH WESTERN</td>
<td>410 ('suspended')</td>
</tr>
<tr>
<td>EAST MIDLANDS</td>
<td>370</td>
</tr>
<tr>
<td>MID SOUTHERN</td>
<td>300</td>
</tr>
<tr>
<td>GLC</td>
<td>260</td>
</tr>
<tr>
<td>NORTHERN</td>
<td>240</td>
</tr>
</tbody>
</table>

NB: Caretaker cleaning is additional to the above

Source: Analysis of Provincial Agreements
Exhibit 11 shows, the level laid down in these agreements varies from one hour's cleaning assistance per week for each 180 square feet (or 16.74 square metres) to an hour for each 300 square feet (or 27.9 square metres) with differences also in the minimum size of the schools for provision of cleaning assistance. There seems to be no reason, based on the evidence of the sample data, why there should be such wide disparity between the provincial agreements.

99. Financial savings have been made by some LEAs who have modified their provincial agreements but without moving to productivity schemes. In one of the sample LEAs staffing levels are in excess of the provincial agreement levels. The differences date from the mid 1960s and the reasons for them are not clear, even to the LEA itself. Additional cleaning assistance may in the past have been given to schools in this LEA which claimed to have special difficulties because of the nature of the site or the buildings. Plans are in progress to achieve lower staffing levels for all schools in the LEA by 1985–86 through natural wastage. The conclusion to be drawn is that LEAs may need to review the criteria used to assess their staffing levels.

100. Another LEA operates a scheme based on the provincial agreement but maintains a relatively low operating cost through gradual, but repeated, arbitrary cuts. The introduction of a work measurement based scheme is claimed to be a high priority in this LEA but as yet the personnel department has been unable to undertake the necessary preparatory work. Arbitrary cost cutting, unrelated to standards or workload, will not, however, provide a sound basis for an efficient and effective service.

101. Political considerations can lead to decisions which on cost grounds would not be preferred. For instance the cleaning of schools in one LEA has been the subject of a District Audit report. The officers recognise the weakness and have designed a bonus scheme which would, on the evidence of a pilot scheme, make savings of some 42 per cent in cleaning hours. The scheme has been rejected by members because of the job losses which would occur. A common cleaning specification for the whole authority should eventually make savings roughly equivalent to those of the bonus scheme because of alterations in frequencies, the paying of only a half-pay retainer for four weeks in the year and lower limits on the hours of new staff. The scheme can only be introduced as vacancies occur and progress is therefore slow. Nevertheless, because options were kept open significant savings will eventually be achieved.

102. Remuneration levels and costs per full-time equivalent (FTE) employee are significantly affected by: the type of cleaning scheme - provincial council formula or productivity agreement, bonus pay received under any productivity agreements, London "weighting" (for which a deduction of 17 per cent has been made in the analysis of the sample data), and overtime pay particularly where the school is used extensively for community use. In the present context costs per FTE employee are taken to include the caretaking functions other than cleaning. They are made up of gross pay and employers' national insurance and superannuation contributions. (They do not include value of caretakers' accommodation).

103. Many LEAs have negotiated local agreements on bonus pay for increased productivity in the cleaning of their schools. This increased productivity is reflected in a requirement for considerably less cleaning hours. The net result is that the LEAs achieve significant financial savings on cleaning. Two broad categories of scheme may be identified: incentive bonus schemes which relate pay to individual or group performance in achieving set daily or weekly cleaning tasks; and productivity schemes which having determined the cleaning tasks to be undertaken, prescribe a
Exhibit 12

COMPARISON OF CLEANER PRODUCTIVITY - 1984
Provincial vs Productivity Schemes
fixed payment for their completion, usually on a weekly basis. About one third of all secondary school cleaners are estimated to be now working on a bonus scheme.

104. Exhibit 12 shows that there is a clear indication that the productivity based schemes provide better value for money than provincial schemes. This indication is confirmed by the difference in cost per square metre:

<table>
<thead>
<tr>
<th></th>
<th>Productivity based schools</th>
<th>Schools on provincial scheme i.e. non-productivity</th>
<th>Difference (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower quartile</td>
<td>4.60</td>
<td>5.00</td>
<td>8</td>
</tr>
<tr>
<td>Median</td>
<td>5.10</td>
<td>5.70</td>
<td>11</td>
</tr>
<tr>
<td>Mean</td>
<td>5.10</td>
<td>5.90</td>
<td>14</td>
</tr>
<tr>
<td>Upper quartile</td>
<td>5.60</td>
<td>6.60</td>
<td>15</td>
</tr>
</tbody>
</table>

105. The six sample LEAs with bonus schemes have all opted for productivity schemes rather than incentive bonus schemes. The latter require detailed measurement, monitoring and control to ensure that they work effectively in terms of levels of bonus pay reflecting levels of work performance. Although productivity schemes are themselves generally based on some work measurement their primary objective is to establish the staffing numbers required to achieve the stated productivity levels. This is illustrated by the fact that there were no examples among the sample LEAs of bonus pay having subsequently been withdrawn because of unsatisfactory work performance by the cleaning staff. With productivity schemes detailed measurement in a sample of schools is generally applied across all schools on a floor area basis. In this way costs of implementation are relatively low, and subsequent costs of maintaining the scheme are minimal.

106. Most productivity schemes are based on a detailed schedule of frequencies for individual cleaning tasks. Examination of the frequencies facilitates identification of tasks where a lower standard might be acceptable. These schedules have been used by some of the sample LEAs for this purpose. They provide a much better basis for achieving value for money than do arbitrary cuts, whose effects on standards of cleanliness are impossible to assess. Examples of both approaches to cost reduction were found among the sample LEAs. LEAs who had made arbitrary cuts were still among the higher cost authorities.

107. Once installed, regular review of any productivity or incentive bonus scheme is essential. Significant savings can be achieved in the existing bonus schemes of some LEAs. Bonus schemes can become out of date very quickly as floor areas and surfaces change; new heating systems may generate less dirt; and the introduction of new machinery and materials simplifies and speeds up particular operations. One of the sample LEAs' schemes based on surface measurements and frequencies was introduced five years ago, and is acknowledged by officers to be out-of-date: revision has been delayed by reorganisation of secondary education within the LEA and remeasurement will commence when this reorganisation is complete. A saving of £100,000 per annum was achieved in 1982, mainly by minor adjustments in frequencies; but the LEA anticipates that much larger savings will be made upon full remeasurement.

108. A full evaluation was carried out by one sample LEA of the desirability of a revised bonus scheme compared with a contracted out service. After a very thorough evaluation of all the key factors members decided to opt for a revised bonus scheme and a reduction in the working year (from 52 weeks to term time only). The major alterations to the
existing bonus scheme concerned the thresholds for payment of bonus, in particular the raising of the normal performance from 75 per cent to 87.5 per cent and effective cuts in the maximum levels of bonus attainable. Annual savings of some £650,000 in 1983-84 were achieved.

109. Perhaps the best overall performance found within the 12 LEAs was based on a bonus scheme which dates from 1974. The scheme provides for 33.5 square metres per cleaning hour which is twice that of the appropriate provincial council agreement. Measurement standards are based on area and type of floor, with specified minimum cleaning frequencies. A target number of cleaning hours is allocated to each school, with an added allowance as a margin for error. A key factor seems to be the system for continual review, where floor area alterations are reported systematically and allocations revised to take account of any changes. Despite the age of the scheme, this system of continuous review leads to low unit costs and the standards of cleaning are considered to be acceptable by members, officers and the staff in the schools.

110. *Using Caretakers Appropriately.* The pay rates for caretakers depend on the size of the school. The rates for assistant caretakers and cleaners do not. The rationale for this distinction is that the caretaker has a burden of overall responsibility which increases with the size of the school. A caretaker is an appreciably more expensive operative than a part-time cleaner: £5.00 per hour as opposed to £2.50. If a caretaker's cleaning duties merely absorb time when he would otherwise be "free" within his working week, they may be cost effective. It may be, however, that he could more profitably spend that time on handyperson duties (as described in Chapter Three) and save expenditure by the LEA on day-to-day maintenance.

111. Although the main thrust of LEAs' savings has been directed towards cleaners productivity, some improvements have been achieved by increasing the amount of cleaning that assistant caretakers are required to undertake where, the preceding paragraph notwithstanding, assistant caretakers are deemed necessary. The national agreement on assistant caretakers is nowhere as comprehensive as for caretakers. The appointment and duties are left to local determination.

112. In one of the sample LEAs, a London borough, significant productivity improvements have been achieved by a reduction in the number of assistant caretakers and also by a reduction in cleaning assistance by six hours at each school. The latter formally recognises, for the first time, that a proportion of the assistant caretaker's time should be devoted to cleaning duties. The improvements follow from a decision that there should be only one assistant caretaker in each secondary school, whereas previously there had been discretion to appoint two or more assistant caretakers at schools with an area in excess of 50,000 square feet. The overall reduction is 13.5 full-time equivalent staff.

113. Close supervision of the work of cleaners is particularly important whether cleaning is done by direct labour or contracted out. Some LEAs employ area and assistant supervisors whose duties include the management of cleaners. But in many schools on-the-spot supervision is exercised by the caretaker.

114. *Cleaning Materials and Equipment.* The comparative costs of cleaning materials were examined in the context of this study. Possible savings are small; indeed, reduction in cleaning materials may be counter-productive. On the other hand, LEAs should examine more closely the advantages of increased mechanisation and, hence, increased productivity. In the sample LEAs there was generally a lack of a planned programme of investment in modern cleaning equipment. There have been significant changes recently in floor surfaces, for example, which can be machine
cleaned. In several of the sample LEAs, the provision of cleaning equipment (e.g. vacuum cleaners, polishers, scrubbers, and wet pick-up vacuums) did not meet even the basic requirements. One LEA, not in the sample, has introduced carpeted areas into schools without taking account of the equipment changes required.

115. The scale of the potential gains is not trivial. In one sample LEA annual savings of £180,000 have been made through a saving in cleaning hours in 1983–84, by the purchase of modern equipment. Even with extra expenditure on additional supervision, enhanced training, and other facilities and equipment costs, net annual savings of over £120,000 are anticipated.

* * * * *

116. All the steps outlined above are designed to increase cleaners' productivity. Some authorities have negotiated changes in conditions of service which have the effect of reducing cleaning costs per hour. For example, the following elements of conditions of service have been subject to local negotiations:

(a) holidays. In one sample LEA, a shire county, new contracts of employment were negotiated with staff so that they would be employed on a reduced basis of term-time only plus two weeks holiday cleaning (about 42 weeks in all). Previously, full year (52 weeks) cleaners had each worked for an average of 45.5 weeks with 4.5 weeks annual holiday and two weeks statutory (public) holiday pay. Annual savings of £361,000 or 19 per cent of wage costs were achieved with only a 12 per cent reduction in the number of overall hours worked by cleaners.

(b) employees' National Insurance. Several authorities are now looking to make savings by imposing maximum hours limits to individual cleaning posts as they become vacant. Currently, the threshold for payment of National Insurance contributions is £34 per week, above which sum employers are required to pay a contribution of 11.45 per cent of total earnings.

(c) split duty pay. In one LEA a pay supplement of five pence per hour in respect of all hours worked is payable to cleaners who work both a morning and evening ("split") shift (e.g. two hours in the morning and 1.5 hours in the evening). The hourly supplement for split shift working can often be avoided by rescheduling of hours.

117. Finally, some authorities (including two in the sample) have contracted out their school cleaning services. Significant cost savings are claimed by these and other LEAs as achievable once the service has settled down. The Commission is, of course, neutral on the general question of whether privatisation is or is not an appropriate move; but where cleaning costs are out of line there is a clear case for establishing whether equivalent service can be secured at lower cost, by inviting competitive tenders. A decision to put the service out to private contract is a matter of local policy and thus no legitimate concern to external auditors - provided that cleaning costs per square metre are as low as is compatible with reasonable service standards.

118. However, the experience of those authorities who have contracted out the service suggests that before contracts are let the following matters should be discussed in detail with potential contractors: the frequency of cleaning proposed by the contractor against the existing service; the adequacy of supervision - supervision from a remote office of the contractor should be viewed with suspicion; the role of the caretaker;
arrangements to ensure cleaning is carried out by staff of the appropriate quality and training; and who holds the keys - if non-LEA staff these should be "named".

119. Finally, the sustainability of planned wage-rates for cleaning staff should be probed. Contracts will be based on an assumed rate per hour that may well be below that of LEA employees when all current employment costs are taken into account. Authorities will need to be satisfied that the quoted rate is sustainable over the period of the contract and that, if local employment prospects improve for example, there is no likelihood of the contractor facing recruitment difficulties.

120. In approaching the issue of delegation to schools the stance of the Audit Commission is, as implied in the philosophy set out in Economy, Efficiency and Effectiveness, that in principle it is to be encouraged. That view is held by Central Government which is putting the principle into practice through the Financial Management Initiative launched by the Prime Minister in May 1982. Similar views are common throughout business and industry.

121. In addition, quite apart from the managerial implications of delegation of authority and accountability to the local level, a corollary of giving more power and influence to school governors is that the head has the scope to make changes. If he or she lacks authority to shift resources or otherwise introduce changes, the governors will inevitably become frustrated and their expectations of what can be achieved will be disappointed.

122. There is of course nothing new in the concept of delegation of considerable authority to individual schools and their heads. This characterises the independent secondary schools in England and Wales. More significantly, it was evidently envisaged by the authors of the 1944 Education Act. The White Paper (Cmnd. 6523 of 1944) on the principles of government for schools issued shortly after the Act was passed includes the following passage:

'...the practice will no doubt generally obtain by which governors prepare estimates covering a suitable period and submit them to the local education authority. Within the broad headings of the approved estimate the governors should have latitude to exercise reasonable discretion. It may be desirable that a small margin for contingencies should be allowed, particularly under the heading of "books, apparatus and stationery"; in any case the allowance under this heading, which is commonly calculated on a capitation basis, should not be too rigidly defined and a school should be entitled to present a case for a higher rate to meet special difficulties and developments. There is general agreement that the school library, the special needs of which have often been overlooked in the past, should be given a separate allowance.'

123. Current practice is very different. Certainly since 1974, the governors of secondary schools rarely receive estimates from heads or submit budgets to LEAs. Responsibility and initiative for creating estimates for individual schools has been accepted by the authority, which has likewise sought to control expenditure in line with the estimates.

124. The one exception to this has been the capitation allowance. This, as its name implies, is an allowance given to each school per head of school population, (with an age-weighting in many secondary schools). The schools have had discretion to spend these capitation allowances as they think fit, provided they do not exceed the total, regardless of heads of expenditure. Typically, capitation schemes will include provision of funds on a per pupil basis for:
- text books, library books and periodicals, teaching apparatus, office equipment;
- printing, stationery and associated materials;
- hire of major housecraft, handicraft and PE equipment and repairs to apparatus and equipment where safety is not a key factor;
- materials for sale to pupils and the cost of materials in connection with crafts (often at least partially recoverable from sales to pupils);
- clothing for PE, swimming and games team expenses;
- expenses relating to field studies, educational visits and organised vacation journeys and school based transport;
- acquisition and maintenance of furniture and fittings; and
- postage, perhaps excluding external examination postages.

These resources are often supplemented by school funds raised voluntarily and by central funds retained at the disposition of the Education Committee and department.

125. On the other hand, a typical capitation scheme will exclude items which are regarded as fixed costs or beyond reasonable school control. These might include: rates; rental of any building; debt charges; insurance of buildings; home to school transport; repair and maintenance contracts where health and safety is a key factor (e.g. gymnasium); and income and expenditure in connection with lettings. Whilst neither of these lists is to be regarded as definitive, the exclusion, or inclusion, of any item would be a point for discussion.

126. Capitation allowances are thus quite limited in scope, as Exhibit 13 overleaf suggests. In a typical secondary school they might amount to £50 per pupil p.a.*, compared with the total average cost in secondary schools of around £900 a year. (This latter figure excludes any allowance for central LEA overheads).

127. The Commission considers that more delegation of authority and responsibility to the local level will result in better value for money and avoidance of waste, provided (the proviso is crucial) that the ground is properly prepared in advance. This chapter therefore describes in turn:

(i) the potential scope for delegation to the local level;
(ii) the requirements for extending delegation successfully, on a step by step basis.

The Commission's observations draw upon the experience of LEAs who have attempted some extension of delegation in the recent past.

128. In theory, subject only to the requirements of the Education Acts, the constraints of an annual budget and nationally agreed terms and conditions of service, and to the curriculum agreed with the governors and the LEA there need be no limit to the authority of a head to shift resources as seems appropriate to provide the best service to pupils with the funds available. Some academic departments can be strengthened at the expense of others; non-teaching staff could be increased or reduced; expenditure on books, equipment and maintenance could be "paid for" by avoiding use of supply teachers, for example. And so forth.

129. There is no reason to suppose that many heads would not be able to use such freedom wisely. Head teachers have often been given considerable areas of decision within their schools. These include: the deployment and grading of teachers; the planning of the school curriculum and timetable; the management structure within the school; and, in some cases, choice over the deployment of teacher support staff. The Commission is now

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* For example, in Cambridgeshire in 1982-83, the allowance was £46.72 per secondary school pupil of 16 and over, £29.36 for secondary school pupils under 16 and £10.16 for primary schools.
Exhibit 13

Scope for most capitation schemes is limited

ANNUAL REVENUE EXPENDITURE – 1983

£'000

Source: Accounts of a secondary school of 830 pupils
studying the problems of managing teachers in secondary schools, where
the role of the head teacher is likely to prove very important. Heads are,
then, already used to managing resources. Moreover, recent experience
with the MSC Technical and Vocational Education Initiative (TVEI)
suggests that when head teachers are given a relatively unconstrained
choice over the balance between teaching staff, non-teaching staff and
materials they welcome what is a possibility of extensive virement (that is,
transferring expenditure from one budget head to another).

130. The obvious addition to most capitation schemes would be to give
head teachers authority over items such as telephone costs, at least some of
the funds for in-service education of teachers, examination fees and
expenses (where schools have reasonable discretion over examination
entries) and control over books, materials and supplies - including the
possibility of virement (i.e. transferring expenditure) between headings and
a facility to carry forward items from year to year.

131. The experience of some authorities with telephone costs illustrates
both the benefits which flow from increased delegation and the role of the
centre. One authority which compared the situation before and after
delegation found that all schools had economised on telephone charges by
20–30 per cent or more so that 'savings' could be spent elsewhere. Another
authority found that a group of its schools spent about 65 per cent of
telephone charges (which average £4,500 per annum per school) on rentals.
For a capital expenditure amounting to only two years' rental if could save
some 70 per cent of annual rental charges. Clearly there would be a need
for the capital expenditure to be under central control since, other
considerations aside, the scheme involved advantageous terms for bulk
purchase of equipment.

132. In addition to relatively small items of expenditure, there are three
other areas where giving heads increased authority and responsibility could
be expected to bring benefits: heating and lighting costs; cleaning and
maintenance; and teacher support staff. Each area is discussed separately
below.

133. Heating and lighting a typical secondary school costs around
£30,000 a year - or perhaps as much as £150 million for all secondary
schools in England and Wales. Savings of 10 per cent or more can be
achieved by technical measures such as insulation, frost protection,
optimum start arrangements on boilers and regular examination of tariffs.
A number of authorities have implemented, or are considering, incentive
saving schemes. The problem lies in fixing fair targets for school energy
consumption; if these are based on historical trends it will benefit the
profligate and penalise the thrifty. More justly it should, therefore, be
based on a technical assessment, school by school, of a reasonable level of
consumption with regard to all the circumstances. Allowance then has to be
made for abnormal weather conditions in any one year (possibly by the use
of the published "degree days") and effective monitoring arrangements
have to be set up. Incentive schemes should be as simple and fair as
possible, with recognition of the authority's investment in conservation
measures as well as good management.

134. The Energy Efficiency Office of the Department of Energy have
drawn attention to the following practical points:
(a) each school should be a cost centre for energy purposes, with
expenditure monitored regularly. A simple targeting and monitoring
system is being developed by LAMSAC, and will be piloted in a
number of local authorities this winter. It should be available for
general release next year, and will eventually provide core systems to
enable local authorities to control energy use;
adequate caretaker training is an essential factor. The caretaker is in a key position to control energy use. Suitable courses are available and advertised in Energy Management, and the Energy Efficiency Office can help;

c) the head should appoint an energy officer (cf. safety and fire officers) to act for him or her and report on progress;

d) the head should ensure that the building is used in an energy efficient manner - controlled start and finish times for the heating, providing heating only in the rooms needed at different times. It is not unknown, for example, for heating to remain on during half-terms and even holidays because there is no independent control for the caretaker's accommodation;

e) a programme of training for teachers and pupils in the efficient use of the building will also help. The Energy Efficiency Office can help with publicity material which highlights the virtually costless and simple measures which can be applied, e.g. care with opening doors and windows, turning off light and heat when rooms are left empty;

f) insulation of the building can be improved by less costly methods such as draught-proofing, automatic door closures and roof insulation. The local authority could provide funds on a rolling basis from savings made on the initial simple measures;

g) upgrading the heating system and particularly its controls often provides worthwhile returns where capital can be made available;

h) energy efficiency measures should be taken into account where regular maintenance programmes are being planned.

Cleaning and Maintenance

135. Assuming that cleaning staffing levels and costs are fixed along the lines suggested above, there is little point in delegating responsibility for these to the local level. However, if they are not so fixed, there is much to be said for involving local management – i.e. heads and caretakers - in the effort to secure competitive productivity. In any event, provided due regard is had to the site conditions and the age and nature of buildings, in any distribution formula it would seem sound practice to include cleaning materials and equipment in delegation. Few examples of wholly satisfactory centralised systems were seen in the study. One LEA which compared expenditure on cleaning materials before and after delegation found that schools spent less on this heading as a result, although they tended to spend more on equipment.

136. Delegation of responsibility for arranging day-to-day repairs and maintenance may also be considered. Unlike many other items considered for delegation this heading has little connection with number of pupils and is influenced by the condition of the building, policies on painting and programmed maintenance and the extent of vandalism. Where use of a direct labour organisation is mandatory, delegation would not benefit schools very much. Some authorities permit expenditure of a small sum on day-to-day maintenance (typically £50) within a delegated scheme. More substantial delegation under this heading should increase the speed of repair, lower administration costs, and improve non-technical monitoring of the work. Reference has been made in paragraphs 78–80 to the possibility of providing for handyperson duties to be undertaken by school based staff. If a budget were allocated to a school there would be the added benefits of local setting of priorities and local incentive to secure value for money. However, the problem of proper technical quality control remains.

Teacher Support Staff

137. Teacher support staff include clerical and administrative staff, laboratory, workshop, AVA and other technicians and all other education support staff, such as librarians and general assistants. They exclude supervisory assistants, school meals, cleaning and grounds staff. They cost a
typical secondary school around £35,000 a year – about the same as is spent typically on books, education equipment, stationery and materials.

138. The educational system has been subject to many changes and developments in recent years, some of which have a direct impact on the need for support staff. Teaching methods have changed with greater emphasis on practical and applied, group and individual learning. There is use of a wider range of material and resources and schools have developed their own materials and worksheets. New national initiatives like the Technical and Vocational Initiative of the MSC and the DES project for low-attaining pupils are bringing pressure for more technology and more work with practical emphasis.

139. The current level of teacher support staff in the sample LEAs varies very widely as Table 11 below shows:

<table>
<thead>
<tr>
<th>Authority Averages Based on Sample Schools Within Each Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of pupils per (FTE) teacher support staff</td>
</tr>
<tr>
<td>Number of pupils per (FTE) member of administrative and clerical staff</td>
</tr>
<tr>
<td>Number of pupils per educational support staff (including technicians)</td>
</tr>
<tr>
<td>Administrative and clerical staff per 100 teachers</td>
</tr>
<tr>
<td>Education support staff per 100 teachers</td>
</tr>
<tr>
<td>High</td>
</tr>
<tr>
<td>227</td>
</tr>
<tr>
<td>537</td>
</tr>
<tr>
<td>482</td>
</tr>
<tr>
<td>6.3</td>
</tr>
<tr>
<td>6.4</td>
</tr>
</tbody>
</table>

140. A few LEAs provide support to schools by means of central units which are excluded from the above statistics. The LEAs providing these central services saw them as supplementary to the basic day-to-day requirements for teacher support staff in the school, and not as a substitute for school based staff. These units may provide repair and maintenance of AVA or workshop equipment and computers. One large educational technology centre is also able to prepare and provide high quality teaching materials including worksheets and visual aids, and a training programme for teachers and teacher support staff. Some LEAs employ peripatetic workshop technicians.

141. The ranges shown in the table are not dissimilar from the findings of other studies. A Scottish Education Department survey in 1977 found a range from 159 to 400 pupils per (FTE) administrative and clerical employee; for technicians only, the range was from 216 to 729 pupils per technician.

142. There are no authoritative national guidelines on the appropriate levels of teaching support staff required. This is scarcely surprising, since it is arguable that such guidelines would be irrelevant. The extent to which teaching support staff can contribute will depend very much on local circumstances - the curriculum and timetable, the competence and commitment of the teaching staff, the nature of the buildings and the equipment available all legitimately influence desirable levels of teacher support. For example, one LEA has just completed a detailed study of requirements for laboratory technicians. This showed that needs differ very widely among schools and that there are many complex factors which affect these needs. This implies that any national guidelines are likely to be dangerously misleading - unless they are so "bland" as to be of little help.

143. It seems likely therefore that heads are better placed to reach sensible judgements on the extent to which support staff could be deployed than some central authority operating a formula however sophisticated. It is perhaps significant that where LEAs had access to new funds for major curriculum developments within the Manpower Services Commission's Technical and Vocational Education Initiative (TVEI), there was a much
more generous provision of teacher support, assessed in most cases on the basis of staffing required for effective 'delivery' of the curriculum.

144. There is thus a strong case for including the provision of support staff within the authority and responsibility delegated to heads. The points systems which are a common method within LEAs for staff allocation could provide the starting point. They are based directly or indirectly on the number of pupils on roll. Weightings may be given for particular factors like type of school, number of pupils over leaving age, age groups distribution, special needs and split sites. Head teachers are allocated a number of points and usually have discretion on how they are to be spent on different kinds of support effort. As the number of pupils on roll falls so does the points entitlement; but there may be certain kinds of effort which will not decline in line with pupil numbers, for example, school-wide administrative tasks or the maintenance of some laboratory equipment.

145. The resulting allowance for support staff would be brought into the school budget; but (as with energy, cleaning and maintenance costs) it would be for local management – i.e. heads in consultation with boards of governors - to determine the precise allocation of resources and staffing levels. Head teachers would also have flexibility to appoint staff for any length of working day or number of hours; to exercise virement between various categories or support staff; and to redeploy staff to other duties as needs change. Local flexibility would of course be subject to overall staffing levels, salaries and conditions of service negotiated by the LEA - the ultimate employer of all school staff at present.

* * *

146. If the items discussed above are all included within a school's 'block grant' from the LEA to be spent as seems appropriate in light of local circumstances, heads would have responsibility for around 25 per cent of the total school costs - compared with about 5 per cent in most schools now. However, such an increase in delegation should only be contemplated if the ground is well prepared. The requirements for success are discussed in the final section of this report.

147. The Commission considers that increased delegation should be introduced carefully and gradually, using selected schools as pilot examples to iron out any practical difficulties with the new arrangements. Head teachers view greater delegation with mixed feelings. Some feel that their management role will conflict with their role as curriculum leader; many feel the need for training and additional administrative support at school level. There is some evidence that the swift introduction of greater delegation can, paradoxically, increase central control and monitoring of a school's affairs and this is unpopular. Many head teachers are concerned that greater delegation to schools will mean simply "the devolution of blame" for cuts in services. Others do not welcome greater delegation because they believe that only small adjustments are possible at the margin of their budgets. They feel it is not worth all the trouble.

148. Moreover, despite the theoretical advantages in terms of possibly securing better value for money, many LEAs still operate a minimal capitation scheme. They recognise that power gained by head teachers and governors is generally power lost by central council committees and departments. Central financial priorities cannot be changed so quickly and mid-year cuts are harder to make. In schemes where extensive delegation is
practised, timing of central decisions such as the deployment of staff and mobile classrooms can present problems in the preparation and operation of individual school budgets. At a time when individual LEAs are taking a much greater interest in the content of the curriculum it is important that central 'pump-priming' funds for development exist. Otherwise devolution by formula tends to fix finance on an historical basis; one school can then only be helped at the expense of another. Greater delegation can also reinforce the natural parochialism of most schools; this parochialism has been modified by the scope for initiative on the part of central committees, officers and advisors.

149. Indeed, many people are in favour of delegation in principle, but are reluctant to move that way at present because of the combined effect of falling rolls and financial constraints.

150. It is evident from the study that the anticipated benefits of increased delegation will not be realised unless the LEA gives careful consideration to:

(i) the strategy for change: it should be gradual and confined to selected schools in the first instance with progress being carefully monitored;

(ii) the central organisation structure within the local education service, which must be adjusted to allow delegation - so that heads and governors are able to "make their own mistakes";

(iii) the systems implications: accurate and timely management information will be essential if overall financial control is not to be lost. This would probably involve extensive use of new information technology;

(iv) staff support and management training for head teachers in those schools to be given additional delegated powers.

151. At least two authorities which have moved to greater delegation have arranged for independent evaluation of their schemes. Where substantial change is envisaged this seems very sensible. Authorities contemplating similar moves would be well advised to read the report published in November 1983 by Tyrell Burgess and Tony Travers of North-East London Polytechnic on the Cambridgeshire Scheme (Working Papers on Institutions No. 53).

152. All schemes must be set against the Articles of Government of the secondary school. Typically, these place responsibility for the overall character of the school with the LEA, for the curriculum with the governors and for the internal management and discipline with the head teacher. In such a framework of shared power and responsibility, lines of accountability in any scheme of delegation need to be clear in practice as well as in theory.

153. The study revealed examples of strategies for delegation which may be categorised as: gradual evolution across all or most schools; sudden change across a small pilot group of schools; and gradual evolution across a small pilot group of schools.

154. Experience so far suggests that authorities which have approached greater delegation by evolution rather than by sudden and swift introduction have experienced fewer problems and appear to have achieved a more acceptable pattern for all parties concerned. This finding is supported by experience in Sweden where a National Board of Education study of delegation undertaken in the mid 1970s concluded that schools which had moved quickly from a highly centralised system to substantial delegation of budgets had not made many changes in spending patterns. It is clear that people need time to adjust their attitudes and develop new processes and procedures. This adjustment is needed by head teachers, their staff, school governors and parents.
155. Each of the evolutionary approaches has its own difficulties. At least in the first instance there is much to be said for delegation to selected schools only - where heads and governors are enthusiastic about the possibilities and staff (particularly the head and deputy head) have the necessary management skills. But whilst selective schemes are operating the LEA will need to run parallel systems at the centre. Care will also be needed in drawing conclusions from enthusiastic participants for application to the less keen. However, the alternative of gradual extension of the expenditure headings delegated to all schools in an area or LEA involves greater risks: the credibility of the scheme can be damaged if delegation is forced upon schools unwilling to accept more responsibility and authority and who are poorly equipped to manage it; and the pace of evolution can be limited by opposition from the unenthusiastic. In addition, the central overheads will need to be redeployed, and management information systems adjusted before the benefits of increased delegation are clear - so that it will be difficult to turn back if the anticipated benefits cannot be secured locally.

156. It is, plainly, unrealistic to expect increased delegation to be effective if the existing organisation structure within the LEA and associated responsibilities remain undisturbed. Work now done - and decisions taken - at the centre or in area offices will now be carried out at the local levels. Unless staffing adjustments are made at the centre, conflict and duplication of effort are almost inevitable consequences. Therefore, before launching any effort to increase local (i.e. school) authority and responsibility, LEAs will need to decide on associated changes necessary to their existing structure.

157. Any scheme of delegation requires an effective financial management information system to be in place. Where schools are not themselves processing orders and invoices they must have access to accurate and up to date central records of expenditure and commitment. Where they are, they must have the resources to produce similar information for audit and management control purposes. There is a tendency in non-delegated schemes for the unnecessary duplication of paper work between school and centre. This duplication tends to be retained in the early stages of implementation of a scheme of delegation. Whilst this may be excusable in the initial stages as confidence is established it should not be a long term feature. It will be more easily avoided if there is a clear statement of procedures to be adopted, which is available to all concerned.

158. Another feature of schemes of delegation in their initial stages is the imposition of more checks and balances than is ultimately desirable if the scheme is to meet its objectives. Such checks have included, for example, requiring virements of more than £300 to be approved by boards of governors and the education department or the need to seek central departmental approval for any proposal for staffing changes. The danger of providing for delegation in general and then removing it in detail needs to be guarded against as soon as schemes have become established.

159. The successful introduction of a significant scheme of delegation also requires an explicit statement of the basis upon which individual school budgets are to be constructed, including an agreed basis for inflation, definition of the scope and size of amounts formerly held centrally and which are now to be devolved and an agreed basis for pupil numbers, normally related to the DES 'January Form 7' return. Rules regarding the amount of money which may be carried over into a new financial year need to be clear and sufficiently generous to make a school's long term planning efforts worthwhile. The relationship between the devolved school account and schools' private funds needs to be clear. It is possible to transfer money
from private school funds to main accounts, and there may be certain advantages in so doing.

160. Some delegation schemes involve providing the school with a cheque book for all or part of devolved expenditure. Where money is fed into school accounts in this way questions of cash flow may be significant. Three tranches of 40 per cent, 40 per cent and 20 per cent at the beginning of the autumn, spring and summer terms respectively is a typical pattern. The question also arises of whether the school shall benefit from the interest accruing on money held on deposit in its own account. Whilst this is certainly an incentive to good housekeeping on the part of schools it can represent a significant loss to the authority as a whole. In one large authority operating this system balances in school accounts, even at the end of the financial year totalled more than £800,000. Bank charges, for operating a large number of separate accounts, will also increase.

161. Head teachers who are given more delegated responsibility must have the necessary staff support and management training. It appears that the gradualist approach is more economical in staffing. One LEA has moved steadily to greater delegation against a back-cloth of central staff reduction and no increase at the school level. Another, which moved more swiftly, has had to make a special additional central appointment. These contrasting experiences probably reflect the fact that with gradual devolution it is possible to review and adjust central and local management procedures (as suggested above) to take maximum advantage of the changes, with more sudden moves it is not.

162. The crucial question regarding the staffing needed to operate a delegated scheme is, however, the distribution of paperwork as opposed to decision taking. A scheme which delegates paper and decisions may require additional staff, although the study showed that some LEAs have introduced a greater delegation of paperwork and decision taking with no net increase in staffing. A scheme which, whatever its starting point, seeks to delegate greater decision taking without paperwork should be capable of implementation without significant staffing implications.

163. Where considerable delegation is involved internal audit arrangements may need to be reconsidered; but LEAs who practise considerable delegation have found that only a small increase in audit staff is needed.

164. Finally, the introduction of any pilot scheme for increased delegation needs to be planned very carefully. Every head teacher and his deputy should not only have the appropriate management training but also the opportunity to agree, in advance, the basis on which their delegated powers will be exercised. Appendix B provides an illustrative example as a basis for local discussion of the possibilities. Considerable demands will be made on members and senior officers alike. For example, in the Cambridgeshire case where only a relatively few schools (eight) are involved, the following steps were taken after the Council decided to proceed with the project:

- exploratory meetings were held between officers and education department officials in each school to discuss the scope of the scheme and its objective;
- a review and evaluation group was established comprising the participating heads and chairman of governors; it met once a term;
- the county's Education General Purposes Sub-Committee and the Chairman's Steering Group were available to discuss particular difficulties as and when these arose;
- a detailed handbook of guidance for heads was produced. It covered: the aims of the scheme, the role of heads and governors, the scope of the scheme, the budget process and powers of virement, schools'
ability to carry forward funds not spent at the year end, and points of contact;
- heads initiated informal discussions with staff at the local level, to agree on the formal structure within their school for exercising the delegated responsibility effectively;
- finance committees (of teachers and governors) were established within each school;
- reports from each school were obtained, collated and presented to the review and evaluation group at the end of the first year.
Nonetheless, it was still possible, for example, to find individual members of staff in some of the schools involved who are unaware that the scheme existed or that their school was part of it.

* * *

These are, of course, very early days. But the evidence available so far does not suggest that the kinds of improvements described above in cleaning, maintenance and energy conservation - not to mention more appropriate use of school buildings and teacher support staff - will be achieved without the active participation and commitment of heads and their staffs and governors. Such involvement is unlikely to be forthcoming without some positive incentive. The objective of increasing delegation is to provide this incentive, so that local schools have more flexibility to meet pupils' needs better. Such an approach is fundamental to the management of any sizable concern; and secondary schools appear, to the Commission, to be no exception. But careful preparation is essential.

The Commission's auditors will be working with local education authorities in the forthcoming audit round to help them tackle the difficult problems to which this report has drawn attention and at the same time to help them ensure that the available opportunities for securing better value for money in cleaning and day-to-day maintenance are grasped.
Appendix A

ILLUSTRATIVE EXAMPLE

PROPOSALS FOR THE ORGANISATION OF SECONDARY EDUCATION IN THE BARCHESTER AREA*

1. In the period 1984 to 1994 secondary pupil numbers within the authority are expected to decline from 43,000 to 32,300, a drop of some 25 per cent. The Education Committee has been presented with tables and charts showing the projected numbers year-by-year for pupils aged 11 to 15 and those aged 16 to 19. It has also seen figures of projected intakes at age 11 for these years. Similar figures have been presented for each of the eight areas within which schools are currently organised.

2. Expenditure on secondary schools in 1983–4 was £49m over the authority as a whole. It has been clear that if expenditure is to fall with pupil numbers (not necessarily pro-rata – as the GREs for secondary education imply) careful consideration will need to be given to how that affects teaching levels and the curriculum, since some 63 per cent of the total expenditure is on teachers’ salaries. The Education Committee has considered some policy options on how to budget in the face of falling rolls whilst avoiding erosion of the curriculum. They have seen the results of calculations which show that maintenance of the current pupil teacher ratios of 1:18.6 for ages 11 to 16 and 1:12 for sixth form will lead to an increase in unit costs of about 12 per cent by 1994, given the assumption that sixth form participation rates will increase by some 5 per cent in that period. Curriculum-led staffing based on a model curriculum for years one to three and limited options for years four and five, would lead to a 20 per cent increase in unit costs given the present contact ratio. The Education Committee has decided that curriculum-based staffing is desirable in principle, but that it will need to review all area reorganisation proposals and the implied costs and savings before fixing on a staffing scheme.

3. This paper sets out proposals for the Barchester area. It is in four sections dealing in turn with:
   (i) The problem.
   (ii) The options.
   (iii) Evaluation of the options.
   (iv) Recommendations for action.

THE PROBLEM

4. Table A–1 below shows the projected pupil numbers for each of the four schools in Barchester. The figures are based on cohort movements, an assumed increase of 5 per cent in sixth form participation rates within three years (and then constant rates), and the history of parental choice over the last five years. Figures for each year are available to the Education Committee, but the figures for significant years only are shown here. 1986 is the earliest that any reorganisation can be implemented, 1990 the year in which a stable picture emerges, and 1994 the limit of projections.

* Although the location has been disguised, all the numbers are from an actual case example provided to the Study Team.
5. Although there is evidence of net immigration into the area, the District Council Planning Department has been unable to quantify it. No major new housing developments are expected in the area, or are envisaged in the structure plan; and given the precarious financial situation of the town's two largest employers, it would be unwise to plan on the assumption that the projected numbers will be any greater in total than set out in the Table. In all probability the decline will be rather more acute than that shown.

6. If nothing is done, there will be just under 1,000 surplus secondary school places in Barchester by 1994. Table A-2 below shows the position in September for each of the years based on the DES guidelines formula. No allowance has been made for capital building developments, although the Committee has already ear-marked funds for improvements at MacMillan and Grantley.

| Table A-2: SURPLUS SECONDARY SCHOOL PLACES IN BARCHESTER |
|-------------|-------------|-------------|-------------|-------------|-------------|
|             | 1984 | 1986 | 1990 | 1994 | % |
| Trollope     | 99   | 96   | 150  | 155  | 46 |
| MacMillan    | 92   | 160  | 289  | 290  | 65 |
| Harding      | 122  | 174  | 230  | 239  | 50 |
| Grantley     | 84   | 138  | 269  | 312  | 57 |
| Total        | 397  | 566  | 938  | 996  | 55 |

7. Thus, even after the 490 temporary places have been removed, there will be over 500 permanent places surplus to needs. The Audit Commission has calculated that each place costs at least £250, before any teaching cost implications are taken into account; so the cost of doing nothing is likely to be well over £200,000 a year - roughly the equivalent, incidentally, of the deficit expected on a leisure centre for which there is considerable local pressure (the nearest full-sized public swimming pool is 30 miles away in Youngstown).

8. More seriously, without significant additional staffing - for which there are simply not the funds available, given the need to expand further education and social services - all four schools would be unable to deliver the kind of broad, balanced and practical curriculum that the Education Committee has determined to be necessary in the 1990s. Education Department projections show that by 1990, both Harding and Grantley would be reduced to two-form entries, and Trollope would have little more than a one-form entry. Thus the objectives of the recommendations agreed by the Education Committee at its special meeting on January 17 and subsequently approved by the County Council would not be achieved. The status quo would not represent the most effective use of available physical and teaching resources; and without disproportionate additional expenditure, the curriculum would be eroded and the children of the Barchester area would be provided with an inferior educational programme.

9. A multi-disciplinary project team from Education, Property and the Treasurers' departments has therefore examined the situation locally. Informal discussions have been held with members and officers of the District Council Recreation Services Committee, governors of the schools involved and their teaching staffs; and public meetings were held on May 2 and 8 to discuss the nature of the problem and the possible options.

THE OPTIONS

10. As a result of the team's work, and the local consultations, the following options have been identified as worth serious consideration:

(1) Close Trollope and transfer the pupils to Harding and MacMillan,
leaving Grantley as at present. The school would be closed over two years (1985 and 1986). Assuming that planned admission limits were defined so as to make maximum use of permanent accommodation by filling the relatively modern Harding school buildings, the number of surplus places would decline by 336 (the permanent places at Trollope).

(2) **Close Trollope and amalgamate Harding and MacMillan schools.** Under this option, all Trollope pupils would transfer to the amalgamated school; all secondary education in the area would therefore be provided on three sites, with one split-site school. This would provide the Education Committee with the opportunity that it has long sought to bring the buildings at Harding and MacMillan up to standard; and some 100 additional permanent places might be removed in the process. There would thus be around 450 fewer surplus places than under the do nothing option.

(3) **Close MacMillan and transfer the pupils to Harding and Trollope.** This option has emerged from local discussions as a means of preserving the Trollope school and increasing its viability. The effects of declining numbers could be mitigated by enlarging its catchment area. But the existing catchment area includes the whole rural area to the west of Barchester; so any additional pupils would have to come from the town itself. In order to ensure a full two forms of entry, approximately 25 pupils a year would be involved, making an eventual total of 125 pupils to be transported. This would be possible either by formally adding part of the southern half of Barchester to the school's catchment area; or by offering all Barchester parents a completely free choice between schools and providing free transport for the children of those choosing the Trollope school. Of course the additional costs of school transport (an estimated £8,500 a year at today's prices) will need to be taken into account.

Some 640 surplus places would be taken out of use under this option, after allowing for the need to add 115 permanent places at Trollope.

(4) **Establish a federation of schools in Barchester.** The idea of developing a federal or collegiate system in the town has emerged from the local discussions. Federal systems have been developed in various parts of the country most notably at Banbury in Oxfordshire, as a means of making a change to comprehensive forms of organisation without creating over-large units. Existing schools have been grouped under one governing body and one head or principal; and each school is redesignated a "hall" or "wing" with its own head who is a member of the senior management team. The teaching establishment is allocated to the federation as a whole, and the head and governors are responsible for the internal allocation of staff to individual halls. The same applies to furniture, capitation and all other resources.

Although such systems have been established as a form of comprehensive secondary education, the basic structure allows flexibility. There are various forms of federation, which offers a structure that can be modified to take account of local wishes and circumstances. For example one wing might perform the lower school function; another might house the older children. Alternatively the schools could serve as bases for the whole age range, with the rationalisation of course provision between them.

(5) **Close Trollope and establish a federation of the remaining three
This option is, obviously, a variation of option 4, but would result in the closure of Trollope and the concentration of all the area's resources on the remaining three schools. The Trollope school would be closed over the two years 1985 and 1986, and all its pupils would be included in the federation's catchment area. As with the other options involving the closure of Trollope, 336 surplus places in permanent construction would be removed from the system in 1986.

11. While not exhaustive, these are the only options that the team considers worth detailed evaluation; no other realistic alternatives were identified at the meetings that the team has held at the local level.

**EVALUATION OF THE OPTIONS**

12. The options have been evaluated by reference to the following considerations:

(a) Educational consequences. The first requirement is that the schools should be able to provide the necessary broad based curriculum with the teaching resources likely to be available.

(b) Parental choice. Clearly it would be better to select an option which is more likely to meet with the approval of parents than one which involves preserving a less favoured school at the expense of a more popular one.

(c) Cost. In addition to the normal running costs of the schools, the evaluation needs to take account of the opportunity cost of using sites for different purposes.

(d) Feasibility. The problem of carrying proposals through the local community and implementation difficulties need to be taken into account at this stage.

**Education Consequences**

13. Under all the options, pupils would be offered the same curriculum. However, the shortage of suitably qualified teaching staff in some specialist subjects means that the options with smaller teaching staff requirements are to be preferred on educational grounds, if none other. Table A–3 below shows the teaching staff establishment for curriculum-led schooling in September 1990 under the various options. We have also shown, for comparative purposes, the establishment assuming the current Committee-approved pupil:teacher ratios for different age cohorts.

*Table A–3: TEACHING STAFF REQUIREMENTS*

<table>
<thead>
<tr>
<th></th>
<th>Curriculum-Led Staffing</th>
<th>Approved Pupil: Teacher Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option 1</td>
<td>89.4</td>
<td>72.7</td>
</tr>
<tr>
<td>Option 2</td>
<td>87.8</td>
<td>75.4</td>
</tr>
<tr>
<td>Options</td>
<td>88.7</td>
<td>75.4</td>
</tr>
<tr>
<td>Option 4</td>
<td>77.3</td>
<td>75.4</td>
</tr>
<tr>
<td>Option 5</td>
<td>77.3</td>
<td>75.4</td>
</tr>
</tbody>
</table>

14. It will be evident that the two federation options appear more attractive than the other alternatives (among which there is little to choose on educational grounds), particularly if curriculum-led staffing is adopted, as the Committee intends.

**Parental Choice**

15. The effects of the 1980 Education Act were not taken fully into account in the projections shown in Table A–1, which was based on the observed impact of parental choice over the previous five years, and took into account possible local housing growth.

16. There is some evidence that parental choices have changed since the implementation of the 1980 Act. Revised forecasts were therefore prepared, based on the average pattern of choice during the three years.
since the Act has been in operation. Table A–4 shows the differences between the original school-by-school projections and those based on the latest parental choice. It suggests that on a parental choice basis Trollope and (particularly) Harding should be closed or rationalised before either MacMillan or Grantley.

<table>
<thead>
<tr>
<th></th>
<th>Change</th>
<th>% Of Original Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trollope</td>
<td>-29</td>
<td>-16.0</td>
</tr>
<tr>
<td>MacMillan</td>
<td>+74</td>
<td>+16.1</td>
</tr>
<tr>
<td>Harding</td>
<td>-59</td>
<td>-21.5</td>
</tr>
<tr>
<td>Grantley</td>
<td>+14</td>
<td>+3.2</td>
</tr>
</tbody>
</table>

17. The following costs need to be taken into account in assessing the implications of the various options:
- The normal running costs of the schools (including additional transport costs for pupils).
- The capital costs associated with the transition, amortised over 30 years; in each case the improvement plans approved by the Committee will be implemented in those schools retained.
- The annual income anticipated from the receipts arising from the sale of the site of buildings, based on the Property Department's assessment of the value of the site and current facilities.

18. The critical assumptions involve the value and possible future use of the Trollope and MacMillan sites.
19. The Trollope school has the most satisfactory buildings of the four; the sports facilities (swimming pool and gymnasium) in particular could well provide the core for the leisure centre for which there is considerable local pressure. The District Council is contemplating a purpose-built centre on an out-of-town site on the Netherleigh road at a cost of over £4 million (of which the site would account for around £1 million). The District's Leisure Committee is interested in acquiring the Trollope site and buildings for around £1.4 million; and it might save itself up to £1 million in total by converting the existing buildings for community use rather than undertaking a greenfield development, since the conversion is most unlikely to cost more than £1.6 million.

20. MacMillan school, on the other hand, is not in such a convenient situation. A number of possible alternative uses have been identified, including remodelling part of the site as a primary school and using some of the buildings - again with extensive remodelling - as a day care centre, sheltered housing and residential accommodation for up to 120 elderly people. In which case, part of the site would be transferred to Social Services at an open-market value of perhaps £500,000.

Alternatively, the site might be sold for housing development. But we understand that the local housing market is not strong; and the prospects of realising more than £700,000 for the whole site and buildings are remote.

21. Table A–5 below shows the costs involved. For ease of calculation we have shown the costs in 1990 of the various options assuming curriculum-led staffing. We have also shown the net present value (NPV) of the cost savings over the next decade on the assumption that disposal (in 1987) of the Trollope site and facilities raises £1.25 million and the MacMillan site raises £600,000. For ease of calculation we have assumed that the capital receipts earn interest at the rate of 10 per cent, and that inflation during the period averages 7 per cent. The relative positions of the various options in financial terms will not change with anything other than unrealistically extreme assumptions e.g. on site values. Details of the financial calculations will be available at the meeting, if required.
### Table A-5: COST IMPLICATIONS

<table>
<thead>
<tr>
<th></th>
<th>Operating Cost in 1990* (£ million)</th>
<th>NPV of Cost Savings (discounted at 2.8%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option 1</td>
<td>£11.63</td>
<td>4.63</td>
</tr>
<tr>
<td>Option 2</td>
<td>11.54</td>
<td>5.24</td>
</tr>
<tr>
<td>Option 3</td>
<td>11.41</td>
<td>5.51</td>
</tr>
<tr>
<td>Option 4</td>
<td>11.96</td>
<td>1.27</td>
</tr>
<tr>
<td>Option 5</td>
<td>11.43</td>
<td>5.97</td>
</tr>
</tbody>
</table>

[Memorandum: status quo] 12.15

### Feasibility

22. The proposals to close either Trollope or MacMillan are bound to run into local opposition, although the two meetings with parents at these schools were relatively poorly attended and the discussion was fairly low key.

23. However the closure of the MacMillan school is likely to run into more local opposition than will the closure of Trollope: converting the site and buildings to community use provides an opportunity to generate some positive support from the local electorate which has been pressing for a new leisure centre for several years.

24. It would be tempting to suggest that the most feasible option is number 4, involving a federation of schools in Barchester and no closures. Certainly, the level of public opposition is likely to be lower for this option than for any of the others. However, the team has serious doubts about a federation concept involving all four schools. Implementation of any federation will be far from easy; and it will be especially difficult if it is obvious to all concerned that there remains significant surplus capacity in the local school system which, sooner or later, will need to be rationalised. In such circumstances, the inter-hall tension and jockeying for position will be intense; and the prospects for a successful federation will not be good. Moreover the long-standing rivalry between Trollope and MacMillan – reflected in some difficult personal relationships among staff locally - will be particularly difficult to accommodate.

### RECOMMENDATIONS FOR ACTION

25. The Team’s evaluation of the various options is summarised in Table 6 below.

<table>
<thead>
<tr>
<th></th>
<th>Education (teaching staff numbers)</th>
<th>Parental Preference (rank)</th>
<th>Cost Saving v Status Quo (£000, pa)</th>
<th>Feasibility (rank)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option 1</td>
<td>89.4</td>
<td>2</td>
<td>520</td>
<td>1</td>
</tr>
<tr>
<td>Option 2</td>
<td>87.8</td>
<td>4</td>
<td>610</td>
<td>4</td>
</tr>
<tr>
<td>Option 3</td>
<td>88.7</td>
<td>5 (worst)</td>
<td>740</td>
<td>5</td>
</tr>
<tr>
<td>Option 4</td>
<td>77.3</td>
<td>1 (best)</td>
<td>190</td>
<td>3</td>
</tr>
<tr>
<td>Option 5</td>
<td>77.3</td>
<td>3</td>
<td>720</td>
<td>2</td>
</tr>
</tbody>
</table>

26. On this basis, the choice lies between options 1 and 5. Those options involving the closure or amalgamation of the MacMillan school (2 and 3) are unattractive on grounds of parental preference and feasibility. The federation option 4 is superficially attractive in terms of teaching requirements; and, at least in the short term, there should not be any insuperable problem carrying local opinion. But the cost implications are unattractive - over £500,000 a year in additional costs vs option 5 and £300,000 vs option 1; and the practical and managerial problems should not be underestimated.

27. The Committee is therefore asked to decide between two alternatives, both of which involve the closure of the Trollope school and the sale...

* For curriculum led staffing, at 1984 prices.
of the site and buildings to the District Council for conversion to community use:

(a) Option 1: The Trollope school would close in 1986 and pupils' parents would be given the choice between the remaining three schools in Barchester; the current broadly based curriculum in each school would remain as at present.

(b) Option 5: The three schools remaining after the closure of the Trollope school would form a federation. The precise nature of this federation would be left for local determination; but almost certainly it would involve some specialisation in terms of subjects offered.

28. It will be evident that the limited federation option 5 is preferable on cost grounds and requires ten fewer teachers for a curriculum-led establishment; but it might face more local opposition and could be more difficult to manage than leaving the three remaining schools as they are now. The key issues to be resolved, therefore, are the following:

- Does the Committee consider that a three-school federation in Barchester can be managed by the existing management team in the town.

- If so, is the additional parental opposition to federation involving MacMillan and Grantley — and more transporting of children in the future - sufficient to justify the additional expenses of around £1.3 million (NPV) and the requirement for an additional twelve teachers (assuming curriculum-led staffing).

29. Once the choice is made, the Committee's proposals should be set out for formal consultation in accordance with the statutory requirements. Since it is likely to be at least nine months from the time when the proposals are published to a decision by the Secretary of State, the sooner that the proposals are published formally, the better.

October 1984
ILLUSTRATIVE GROUNDRULES FOR DELEGATION

1. This Appendix illustrates how the budget for those services where authority and responsibility are delegated to the school level might be prepared and controlled. It covers in turn the procedures for setting up budgets, an illustrative budget and arrangements for controlling the expenditure. All the material is purely illustrative, to provide those concerned with examples of how increased delegation might work in practice.

2. The following timetable could be applied for developing an agreed budget for those school services which are to be delegated to the local level:
   - By October 1 each year, the education department might issue a draft budget for the following financial year to head teachers for the items to be controlled at the school level.
   - During October head teachers could be invited to question any parts of the draft budget, following discussions with governors.
   - Bearing in mind points raised by head teachers, the authority could issue budgets by (say) November 30, for all delegated services and costs.
   - These budgets would be subject to adjustment in the following January to reflect changes in rolls.

   Apart from the adjustment mentioned above, the Authority would not expect to make any further alterations to delegated budgets. However it could reserve the right to make changes in response to force majeure.

3. The allowance for telephone costs could take as a starting point the schools actual telephone expenditure last year, adjusted for changes in telephone tariffs and school rolls. In effect, therefore, all savings would accrue to the school.

4. The allowance for in-service training of teachers could cover out-of-pocket costs for the use of teachers’ centres, LEA courses and the net cost to the LEA of other courses (course fees, salaries and travelling expenses less DES refund). In this case too, the allowance could be based on the actual expenditure during the current year to minimise the risk of false economies.

5. Wherever possible, energy allowances should be based on engineering assessments of the school’s energy requirements. For schools which have not yet been assessed, the allowance could be based on a consumption target reflecting achievable savings per square metre in local schools of similar construction and heating and lighting systems.

6. The allowance for cleaning materials and maintenance could cover materials for all cleaning and the full costs of minor maintenance work. (The delegated budget would not be expected to meet major maintenance costs e.g. redecoration, roof repairs). The list of minor maintenance jobs covered by this allowance would need to be issued separately. The budget allowance for these jobs could be under school control for all schools, not just those for which a caretaker/handyperson scheme is in operation.

7. The allowance for teaching support staff would be derived from a points scheme which takes account both of the number of rooms requiring support (laboratories, libraries etc) and the number of pupils in the school.

8. Table B–1 below shows an illustrative budget for delegated services for a secondary school catering for the 11 to 16 age group. It has 1050...
pupils, 60 teachers and 7875m² floor area. The allowances for each delegated budget head are given with explanatory notes where appropriate.

Table B–1: ILLUSTRATIVE DELEGATED BUDGET

<table>
<thead>
<tr>
<th></th>
<th>£,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telephone costs</td>
<td>3.0</td>
</tr>
<tr>
<td>In-Service Training of Teachers</td>
<td>7.8 (1)</td>
</tr>
<tr>
<td>Examination Fees</td>
<td>11.3</td>
</tr>
<tr>
<td>Books</td>
<td>13.9(2)</td>
</tr>
<tr>
<td>Material and Supplies</td>
<td>17.2 (3)</td>
</tr>
<tr>
<td>Heating and Lighting</td>
<td>43.0</td>
</tr>
<tr>
<td>Cleaning materials and Maintenance</td>
<td>6.3 (4)</td>
</tr>
<tr>
<td>Teaching Support Staff</td>
<td>23.5</td>
</tr>
<tr>
<td>Income (net) from Lettings</td>
<td>0 (5)</td>
</tr>
<tr>
<td></td>
<td>126.0</td>
</tr>
</tbody>
</table>

Notes
(1) 60 teachers, £130 per teacher
(2) 1050 pupils, £13.25 per pupil
(3) 1050 pupils, £16.40 per pupil
(4) 80p per square metre
(5) Schools are expected to earn sufficient revenue from lettings to cover all additional costs incurred. Any profit may be retained by the school.

9. Subject only to the rules set out below, the head and governors would spend up to £126,000 during the financial year in question provided that the expenditure they deem appropriate under the various cost headings is met. It will be for the head to ensure that the budgeted total is not exceeded; and he or she will need to receive monthly reports of income and expenditure against budget under each heading, to enable him to control expenditure tightly. These reports should be available within three weeks of the end of the accounting period. Any "savings" under one heading would be available to be spent as the head and governors decide on other delegated services - or simply set aside to meet future needs.

10. The following rules might govern exercise of delegated budgetary responsibilities.
(i) Schools would need to see that all expenditure complies with:
    - standing orders and financial regulations;
    - the Authority’s personnel handbook;
    - the Building User’s manual;
    - policy statements and detailed guidance on health and safety at work.
(ii) Goods, material and services would be obtained through a central contractor or approved supplier, unless the Chief Education Officer and the Authority’s Supplies Officer agree otherwise.
(iii) Building work would need to be completed to the normal standards of the Authority, advice on which should be available from the Architect’s Department. The Authority’s Architect would reserve the right to direct that work be done again, at the school’s expense within the delegated budget.
(iv) The Authority’s agreement would be required for any building contracts which entailed expenditure beyond the financial year in which they are undertaken.
(v) Where there is doubt or disagreement on the allocation of a particular maintenance job between school and Authority maintenance budgets, the building surveyor designated to be responsible for the school would decide the issue.
(vi) Head teachers could be required to review with the governors any
underspends of more than ten per cent of their examination fees and
teacher training budgets.

(vii) For all lettings of school premises, the school would be credited with
a charge at the authority's full hire rate. Where the letting is for a
purpose for which the authority has set a subsidised hire rate, the
difference between the charges would be made up by the authority.

(viii) An in-year adjustment will be made by the authority to each
school's energy allowance to reflect the number of degree days in
each quarter.

(ix) If a teacher leaves a school, the school's delegated budget will be
credited with the cost of any in-service training undergone by the
departing teacher in the previous two years.

(x) Overall underspendings and overspendings at the end of the
financial year would carried forward.

11. These rules do not place any limits on the ability of a head teacher (in
agreement with the governors) to move expenditure from one budget head
to another. The main danger which excessive virement could pose is that
expenditure may be committed for the future. However, the education
department would receive regular reports against budget, so any obvious
problems could be tackled well before the situation becomes out of control.

12. Examination fees are a topic where there may be conflict between
the head teacher's roles as judge of pupils' educational needs and as
manager of the school's delegated budget. In the former role he is the only
person equipped to assess what the examination fees allowance should be.
In the latter role it is in his interest to make an overestimate so that he may
have money available to transfer to other uses. This is the reason for rule
(vi) above.
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