



A safer place

Property risk management in schools

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

The Commission has five main responsibilities:

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

The Commission secures the audit of 32 councils, 27 joint boards (including police and fire services), 47 NHS Trusts, 15 Health Boards, and 5 other NHS bodies. In total, these spend around £12 billion a year of public funds.

Preface

The Accounts Commission for Scotland has undertaken this study of school property-related risks to assist and encourage all new councils in Scotland to develop effective risk-management arrangements. Successful planning of risk management supported by well-developed information systems will improve value for money in the use of scarce resources. Property damage, loss, vandalism and lack of effective school security and access arrangements can demotivate pupils and staff in a school. The impact on teaching and learning can be considerable. Efforts to improve property risk management will be well rewarded by providing a better educational environment within which students can achieve their full potential.

The report is directed principally at managers in the education service. However, its messages apply to all council services that have a property portfolio. Indeed, they extend beyond councils to other public sector organisations, such as the National Health Service.

Public concern about security of schools and public access has increased following the tragic circumstances at Dunblane Primary School in March 1996. Lord Cullen has published his report following the Public Inquiry¹. The Commission recognises that councils and The Scottish Office will be addressing the issue of school security. We believe that our report can make a contribution to that process.

We had the generous support in this study of 11 participating councils, the Scottish Police Service, Strathclyde Fire Brigade, and over 200 head teachers who participated in the school survey. In addition, the following bodies provided valuable advice and assistance during the course of the work:

- The Scottish Office Crime Prevention Unit.
- The Association of Chief Police Officers in Scotland.
- The Chief and Assistant Chief Fire Officers' Association – Scotland.
- The Association of Directors of Education in Scotland.
- The Scottish Office Education and Industry Department.
- The Association of Local Authority Risk Managers in Scotland.
- The Scottish Association of Chief Building Control Officers.
- The Health and Safety Executive.
- Her Majesty's Inspectorate of Schools.

We would also like to express our thanks to the Department of Risk and Financial Services, Glasgow Caledonian University, and to Zurich Municipal, who assisted the Commission's study team in the fieldwork element of the study. The Commission, however, retains sole responsibility for the findings and recommendations in this report.

Commission auditors will use this report, along with the forthcoming management handbook, to focus their local audit enquiries of councils during the coming audit round.

The Commission's study team was Martin Christie, John Lincoln and Jim Lakie within the Local Government Studies Directorate.

¹ The Scottish Office (1996) *The Public Inquiry into the Shootings at Dunblane Primary School on 13 March 1996*, The Hon Lord Cullen, HMSO.

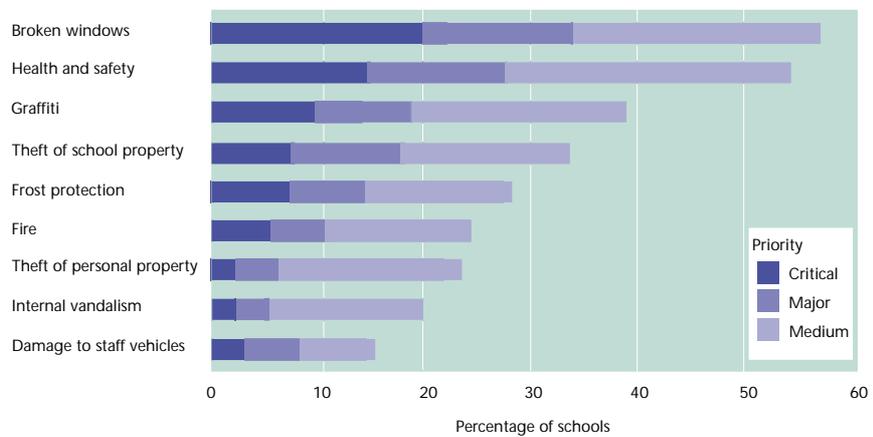
Executive summary

The problem

Scottish councils have large property portfolios, most notably school buildings. In total, they operate some 2,300 primary, 400 secondary, 170 special schools and 240 nursery schools. It is important that these schools are adequately maintained and protected against loss and damage. Two-thirds of head teachers in secondary schools and a half of head teachers in primary schools consider property risks to be a problem. Schools are subject to many different types of property risk. The most significant are crime-related (Exhibit 1).

Exhibit 1: Relative importance of school property risks – the views of head teachers

Property crime is a dominant feature of school property risks.



Source: Accounts Commission survey of head teachers.

Every year, school property crime and its prevention cost education authorities some £18m, consuming about 20% of councils' overstretched school property maintenance budgets.

Vandalism is often targeted at the same school again and again. The cumulative impact of these attacks is very costly. A limited number of schools account for a high proportion of the cost of vandalism damage. In four former education authorities, 20% of schools accounted for about 70% of total losses. In these areas, there are over 100 schools where, in most years, the cost of repairing vandalism alone exceeds £10,000 per school.

Schools are also the principal target of malicious fire-raising. For example, in the former Strathclyde Region's properties, about 95% of all fires occurred in schools. Nine out of ten school fires are started deliberately.

It is not only councils that bear the direct cost of crime. The police respond to about 30,000 intruder alarm calls in schools every year, but about 90% of them turn out to be false or faulty. The cost to Scottish police forces is about £1m a year.

The non-financial costs of crime, however, are often the most important. The visual image presented by a vandalised school can damage its reputation and popularity among parents. Vandalism can damage the morale and ethos of the school, disrupt class work and impair the learning environment.

Key factors associated with school property crime are:

- *Location* – two out of three urban schools have a problem, compared with one in three rural schools.
- *Design and layout* – schools designed and built in the 1960s/70s, having expansive areas of glass, accessible flat roofs, and heavily recessed and hidden areas, are a greater target for crime.
- *Community involvement* – increased community use outwith the school day reduces the opportunity for serious crime.
- *Vulnerable periods* – the majority of property crime happens when schools are closed – in the evenings, at weekends and during school holidays.

Property risks are not confined to crime. Frost protection and health and safety issues feature prominently among head teachers' concerns. During the severe winter of 1995/96, an exceptionally cold spell of weather resulted in many burst pipes and extensive water damage. The cost of damage to schools in the former Highland, Lothian and Tayside regions alone amounted to well over £1m.

In Scotland, school security and public access to schools have, in recent years, become growing problems. The events at Dunblane Primary School in March 1996 have resulted in great national concern about security and access to schools. More than half of the head teachers surveyed by the Commission's study team identified improved control over access to their school as a priority need.

Management of risks

The Commission wished to identify the extent to which councils had embraced a commitment to managing property risks. Most councils studied had established specific school-vandalism groups, generally in response to a severe problem. In recent years, however, councils have been unable to maintain the momentum of these initiatives, mainly due to the limited budgets allocated to such initiatives relative to the scale of the problem, and because a large amount of management time has been devoted to local government reorganisation.

The police and fire services offer various initiatives and advice to help councils assess and reduce their exposure to crime and fire. Councils have not made best use of these services. More can be done by councils to design crime out of new and refurbished schools. The development of a strong link with local crime-prevention initiatives is to be encouraged.

The education service has core responsibility for schools, but under devolved school management (DSM) schemes, head teachers directly manage at least 80% of the school budget. Under most DSM schemes, the council meets the cost of school vandalism occurring outwith the school day; each school is required to bear the cost of vandalism and losses from theft arising during school hours.

Head teachers are generally able to implement low-cost prevention measures, which can have a significant impact on reducing risks. For any expensive measure, however, all schools rely on the support of their council.

Users know their buildings best, but around half of head teachers feel inadequately consulted before physical measures are installed. In addition, janitors are very rarely consulted before decisions are made on the most appropriate preventative action.

The head teacher has a key role to play in championing the cause of property risk management and looking after the health and safety of all pupils, parents, staff and visitors to the school. Significantly, however, less than one in three head teachers has been given relevant training in property risk management.

There are significant weaknesses in councils' management information. Councils almost exclusively rely on their property maintenance records for information on school property crime. These records do not give a full picture because they exclude losses arising from theft and from damage not made good. Councils need good-quality information on the incidence and cost of school property crime to enable them to prioritise and target their preventative action.

Most school head teachers are not provided with the vandalism costs for their school but would generally welcome such information.

Risk-reduction measures taken

Councils have invested about £1m a year in a number of pilot schemes in schools to evaluate the effectiveness of closed-circuit television (CCTV) and other property-protection packages. These schemes have produced remarkable reductions in crime, many paying for themselves in less than three years. However, only a minority of schools with vandalism problems have been covered by such schemes.

Thirty-five per cent of schools have been the subject of a crime-prevention audit in the last three years. In the same period, health and safety audits have been carried out in 70% of schools. These audits have resulted in prioritised recommendations for action. In addition, councils have introduced ad hoc protection measures into affected schools in response to specific vandalism and security problems. The most commonly found measures are fire and intruder alarms, procedures designed to control visitors' and contractors' access, installation of security lights, glazing substitutes and shutters across alcoves.

Experience shows that physical measures are not effective in isolation. Their continuing success depends on enlisting the support of the school and its community.

Pilot schemes excepted, councils have not conducted any year on year analysis by school to measure the extent to which individual risk-reduction measures have been successful. Without effective monitoring and review mechanisms, councils cannot present a financial case for investing in similar security measures in other schools.

What needs to be done

Effective risk management of school property reduces vandalism, improves the security of schools and improves the learning and working environment for pupils and staff. It also delivers good value for money by ensuring better targeting of resources and reducing the cost of avoidable losses.

Accordingly, the Commission wishes to encourage councils to adopt effective methods of property risk management as part of their overall management arrangements. The key actions that councils will have to take are:

- adopt an organisational commitment to risk management
- improve risk-management education, training and awareness
- identify specific risk areas
- develop effective information systems

- design crime out of schools
- provide corporate support for local solutions
- improve control over access to schools
- install physical measures to protect schools from crime.

There is a strong economic case for councils to increase their investment in crime-prevention packages in the worst-affected schools. For example, a four-year programme investing £4m a year could reduce councils' losses from property crime by £5m a year after just four years.

There is a separate case to be made for improving the security of pupils and staff in schools. The objective is to provide a safe environment and give assurance to the pupils, parents, staff and the local community. Risk assessments will determine the most feasible solution for each school.

Ultimately, the amount of money which can be allocated to school security can be determined only through democratic means because the need has to be weighed against competing priorities for expenditure in other areas. The Government is to introduce a specific grant to assist education authorities to implement security improvements in schools. This will be helpful to councils but they will still need to find other sources of finance.

In its report, 'Room for Learning'², the Commission identified that councils could achieve recurring annual savings totalling around £25m, by disposing of surplus capacity in schools. The avoidance of outstanding maintenance requirements in these schools would save a further one-off £20m. While some councils have already taken steps to dispose of their surplus capacity, others have tackled this area with less vigour.

All councils will be looking to protect their schools, which will involve reviewing a number of options available to them, each having different costs. The Commission believes there should be an information network established to exchange and promote ideas on the good practice initiatives adopted by councils. In this way, councils can benefit from the experience of others and avoid costly mistakes. The Convention of Scottish Local Authorities (COSLA) may wish to take the lead role, and the Commission would be willing to support such an initiative.

Implementing the recommendations in this report will take commitment, from councillors, senior management and head teachers, with support from bodies such as the police and fire services. Councils will also have to spend in the short term to save in the medium term. The money will be difficult to find for some councils, but if the issues identified in this report are ignored, then the cost of damage from crime and vandalism is likely to continue to rise and the security of schools may not be adequately improved. This may have the further effect of lowering the morale of pupils and staff, and may impact adversely on the quality of the learning environment.

This report shows that effective action can be taken. The Commission looks to all councils to follow the example of those that have tackled the issues by taking a corporate approach to risk management of their property, particularly in relation to school buildings.

² The Accounts Commission (1995) *Room for Learning*.

1. Introduction

The problem

Head teachers are concerned about intruders who enter schools and their grounds. The events at Dunblane have brought into sharp focus the problems relating to access and security of schools. The public wishes to be assured that councils provide a safe learning and working environment for the children, staff and members of the community who use school facilities.

“Vandalism presents a poor image to the public, damages the school’s reputation and costs money.”

*Secondary school,
South Lanarkshire Council.*

Schools are also the target of considerable property-related crime, including fire-raising, vandalism and theft. In the past, there has been very limited published information on the extent and scale of school property crime. In 1992, insurance companies reported that the cost of vandalism was equivalent to £13.50 per pupil, compared with an average of £12 per pupil spent on books.

The non-financial effects of school property crime are significant. They include disruption to the running of the school and the loss of use of vital equipment. Moreover, repeated acts of vandalism and damage to property have a demotivating impact on pupils, staff and the wider school community. If left unchecked, the steady decline in morale in a school adversely affects the teaching and learning process. Conversely, positive action taken to address property risks will enhance the school’s morale, learning environment and reputation.

The scale of the task facing councils is reflected in the size of their school property portfolio. Across Scotland, local education authorities operate some 2,300 primary and 400 secondary schools, in addition to approximately 170 special schools and 240 nursery schools. There are a further 557 nursery departments located in primary schools. Every school is different in terms of its number of pupils, size, layout and location. Table 1 shows the range in the number of pupils per school in the primary and secondary sectors.

Table 1: School pupil numbers, September 1995

Primary sector — 440,758 pupils, 2,333 schools					
Pupil numbers	Under 100	101 – 200	201 – 300	301 – 400	Over 400
Percentage of schools	34	22	22	13	9
Secondary sector — 316,957 pupils, 406 schools					
Pupil numbers	Under 200	201 – 500	501 – 800	801 – 1,100	Over 1,100
Percentage of schools	10	13	26	34	17

Source: The Scottish Office Statistical Bulletin, Education Series, August 1996.

There are significant pressures on councils to take reasonable and practical steps to provide safer schools. The case for council action has major financial implications in an economic climate where it is increasingly difficult for councils to find resources. The resources allocated to tackle these problems must be spent wisely. Councils will need to prioritise and target their investment to areas of greatest risk.

Property risks are not confined to crime-related activity. The profile of risk management in schools was raised by the severe winter of 1995/96. Burst pipes resulted in flooding and damage to buildings and contents, and the costly and disruptive transfer of displaced pupils to other schools. These experiences emphasise to councils the importance of planned preventative action and of having effective processes in place for managing both the response to such events and their consequences.

Council reorganisation in April 1996 increased the number of Scottish mainland education authorities from 9 to 29. As a result of this process, there has been a loss of senior management expertise and experience. Many managers now have new and wider responsibilities. We hope that this study will provide timely advice to the new councils about how to improve property risk-management arrangements.

The approach to the study

We had valuable support from The Scottish Office Crime Prevention Unit, the police and fire services, the Health and Safety Executive and professional associations involved in risk management. We consulted widely with those who hold management responsibilities within the councils for education, property, health and safety, community safety, insurance and risk management, and building control.

We obtained the views of over 200 head teachers about property-related risks in their schools. In addition, we contracted the Department of Risk and Financial Services, Glasgow Caledonian University, and Zurich Municipal to undertake property risk case studies and full fire and security risk audits, in a selected number of schools. The study fieldwork is described in the Appendix.

The study had the following objectives in relation to managing school properties:

- raise the profile of property risk management in councils
- reveal the incidence and cost of property-related risks
- highlight the key features for securing effective property risk management
- promote best crime-reduction practice – giving examples of successful initiatives
- encourage councils to adopt a strategy to reduce property-related crime in partnership with the relevant agencies.

The information which we have gathered has provided the basis for a management handbook to be published in the Spring of 1997 as a companion to this report. This will assist head teachers to develop local strategies for managing school property risks, within their council's corporate framework.

Chapter 2 of this report identifies the main school property risks and quantifies the extent of the problems. It reflects the experience of head teachers and highlights the factors associated with school property crime. Issues relating to access to schools and school building design are also examined.

Chapter 3 looks at councils' arrangements for managing property risks; the respective roles of the council, the head teacher and janitor of the school, and pupils' responsibilities. It reviews the methods of financing property risks and the quality of information used by councils to manage property risks.

Chapter 4 looks at the types of risk-reduction measures taken by councils, giving examples of the lessons to be learned.

Chapter 5 examines the financial implications of implementing risk-management strategies to reduce school property crime and to improve the security of schools.

Chapter 6 identifies the steps that councils should take to manage school property risks more effectively.

2. Risks in schools

Identified key risks

Schools are subject to many different types of property risk. The most significant is property-related crime. This includes vandalism (which includes broken windows and graffiti) and fire-raising, as well as the theft of school property.

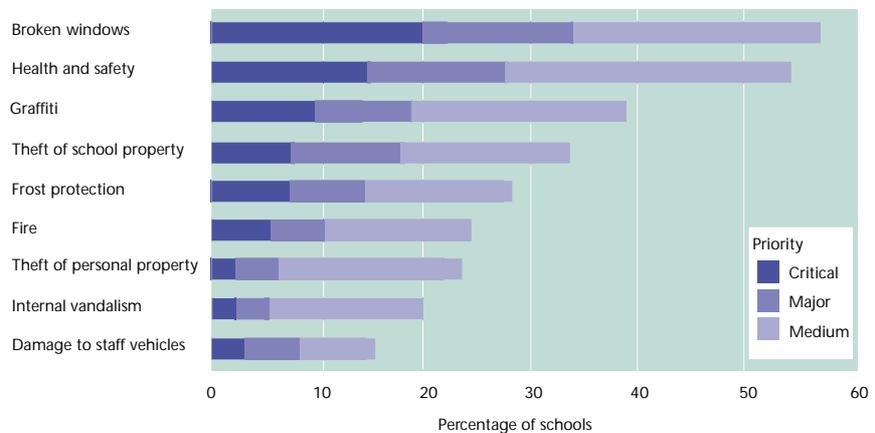
Schools must also comply with health and safety regulations to provide a safe environment for their pupils, staff and visitors.

We sought head teachers' views of the property risks facing their schools and the arrangements in place to manage them. Over 260 head teachers were invited to participate in a questionnaire survey, of whom 214 responded – an 82% response rate.

Two-thirds of secondary and half of primary head teachers identified property risks to be a problem. Their underlying concerns were about vandalism and its impact on their schools, building maintenance issues, health and safety, and the amount of head teachers' time that is spent on property-related matters. Two out of three schools in urban areas, but only one in three in rural areas, considered property-related risks to be a problem. Exhibit 1 shows the relative severity of the types of property-related risks facing schools.

Exhibit 1: Relative importance of school property risks – the views of head teachers

Property crime is a dominant feature of school property risks.



Source: Accounts Commission survey of head teachers.

“The problem is usually broken windows. It causes disruption to classes when the mess is being cleared up and again when windows are being repaired.”

Primary school,
South Lanarkshire Council.

Criminal acts of vandalism, fire and theft feature prominently in head teachers' concerns. Their most serious concern is broken windows, which is a problem in six out of ten schools. Instances of internal vandalism, mainly to toilets, and damage to staff vehicles, occur on a much lesser scale.

Graffiti is a concern in four out of ten schools. In these schools, external walls and toilets are common targets. Small areas of graffiti are quickly removed by janitors, but more expansive areas take longer to remove, giving an impression of decay which may encourage further vandalism.

Most school break-ins involve internal damage together with opportunistic theft. Items of school property most commonly stolen are video recorders, televisions, computers, microwave ovens, audio/visual equipment, cash, stationery and musical instruments.

“A huge backlog of maintenance issues is to be faced by the education authority.”

*Secondary school,
West Lothian Council.*

Other property risks which are a serious problem in schools relate to health and safety and, in part, reflect the standard of maintenance and the building fabric of schools. Indeed, in any review of school security, the maintenance and condition of the building fabric need to be taken into account. Security will not be effective if windows and doors cannot be securely fastened.

Our survey revealed the following head teachers' concerns about school maintenance:

- lack of effective maintenance over a number of years, leading to a general deterioration in the fabric and condition of the building and school grounds
- low maintenance standards, undermining the morale of those who use the building
- poor quality of building construction – principally leaking roofs and inadequate insulation
- a long time between the reporting of damage and completing the permanent repair
- unrepaired damage and graffiti, leading to further problems.

We highlighted the significant school building maintenance backlog in our report, 'Room for Learning', September 1995. Responsibility for this backlog passed to the new unitary councils established in April 1996. A few councils have already taken early steps to reduce their outstanding repairs. South Lanarkshire Council, for example, has already committed £100,000 to complete the repair of broken glass in the 154 schools it inherited from Strathclyde Regional Council.

Occasionally councils also suffer from relatively unpredictable serious losses – for example, the frost damage sustained during the severe winter of 1995/96. A spell of exceptionally cold weather followed by a rapid thaw resulted in burst pipes causing severe water damage. The total cost of losses amounted to many millions of pounds and affected homes and businesses as well as schools. The problem was exacerbated in schools because it occurred over the Christmas/New Year period making it difficult for councils to call out key members of staff who were on holiday.

The cost of damage to schools in the former Highland, Lothian and Tayside regions alone amounted to well over £1m. Many factors contributed to the high level of damage. These included:

- severe weather, which resulted in power cuts, preventing the activation of frost-protection systems
- insulation of water pipes in roof spaces, which had not been designed to cope with extremely low temperatures for such a long period
- striking a balance between energy conservation and providing heating for frost protection. Some heating systems had been turned down or switched off
- lack of contingency planning for exceptionally cold weather. Some contingency plans had not been reviewed for 15 years.

Many of the new councils are reviewing their frost-protection policies following the problems of last winter. The Scottish Office has reported the findings of its 'Severe Weather Working Party'³, which had been commissioned to examine the lessons to be learned from the difficulties experienced as a result of the severe

³ The Scottish Office (1996) *Report of the Severe Weather Working Party*.

weather. In addition to other recommendations, the report urges councils to ensure that appropriate and well-communicated contingency arrangements are in place to deal with such exceptional circumstances in the future.

Costs and incidence of school property crime

Every year, school property-related crime and its prevention cost Scottish councils at least £18m, consuming about 20% of councils' school property maintenance budgets. An analysis of this total cost is shown in Table 2.

Table 2: Costs of property crime, 1994/95

	Cost (£m)
Repairing vandalism ¹	7
Losses from fire ²	5
Property-protection measures ³	5
Investment in specific projects to reduce property crime ⁴	1
Total	18
<p>Notes</p> <p>1 Boarding up and repairing broken windows, removing graffiti, repairing doors, toilet fittings, fencing and lighting etc.</p> <p>2 Estimated cost of replacing fire-damaged property.</p> <p>3 Costs of installing and maintaining intruder alarms, fire alarms, glazing substitutes, shutters and fencing etc. These are generally repairs or low-cost ad hoc measures.</p> <p>4 Costs of specific crime-prevention packages targeted at problem schools as part of a planned strategy.</p> <p style="text-align: right;">Source: Accounts Commission fieldwork.</p>	

While most councils collect information on the cost of property crime, they rarely collate detailed information on its incidence and frequency. An indication of the extent and scale of the problem is reflected in figures available for the former Tayside Regional Council. Its school property crime bill totalled £500,000 a year, resulting from over 3,500 incidents.

£18m is not the total direct cost of crime. There are many additional costs that councils do not generally include in the cost of crime, such as:

- losses from theft of school property, which are not systematically recorded
- costs of decanting pupils
- janitorial overtime as a result of call outs
- costs involved in administering vandalism repairs and processing insurance claims
- higher insurance premiums, as a result of increased claims.

There is a significant burden on the resources of the police and fire services. In addition to responding to requests for assistance, they attend alarm calls and provide guidance and advice to councils and schools on crime and fire prevention.

The non-financial costs of crime, however, may often be the most important, although it is not practicable to quantify them. In schools where property-related risks are a problem, almost three-quarters of head teachers are concerned about the adverse impact of vandalism on the morale of pupils and staff, and on the ethos of the school. The visual image presented by a vandalised school can damage its reputation and adversely influence parent and pupil choice.

“Repeated acts of vandalism leave the staff extremely deflated.”

*Primary school,
Dumfries and Galloway Council.*

From the survey of head teachers and information provided by the police and fire services, it is possible to identify the key factors which contribute to making certain schools high risk (Box 1).

Box 1: Key factors affecting the incidence of school property-related crime

Location <ul style="list-style-type: none">• Schools in major urban areas experience significantly more instances of crime, compared with the majority of schools in rural areas.• Schools in highly populated areas which already suffer from high levels of vandalism, housebreaking and disorder are at greater risk.• Schools in areas of high multiple deprivation tend to suffer greater vandalism.• Schools with poor surveillance from surrounding areas are at greater risk.
Design and layout <ul style="list-style-type: none">• The design features of schools built in the 1960s/70s give rise to increased risk of property crime.• Heavily recessed and hidden buildings are a greater target for crime.• Schools set in extensive grounds, especially grassed areas, become unauthorised golf courses or football pitches out of school hours, leading to increased risk of broken windows and other acts of vandalism or damage.
Community involvement <ul style="list-style-type: none">• Increased community use outwith the core teaching periods reduces the opportunity for serious crime.• Neighbourhoods where little community spirit exists tend to have no crime-prevention action groups and no active involvement with the school.
Vulnerable periods <ul style="list-style-type: none">• Heightened problems tend to be in the evenings, at weekends, and, most significantly, during school holidays – periods when on-site supervision is minimal.• Unused, closed schools are highly vulnerable where there is no evidence of property protection.
Likely perpetrators <ul style="list-style-type: none">• Those thought to be responsible for most damage are males aged 9-16 years.• The police reported a tenuous link between vandalism and children who are allowed, or encouraged, to play unsupervised.

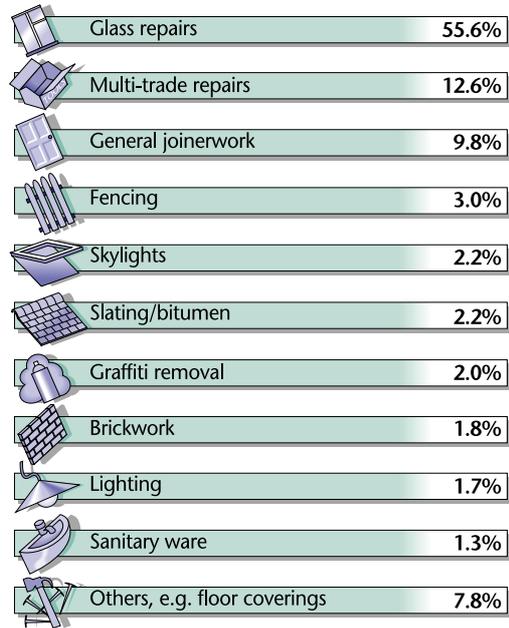
Source: Accounts Commission fieldwork.

Vandalism damage

The most costly aspect of property crime is the repair of vandalism, of which the boarding up and repair of windows is the largest element. Broken glass is a serious problem in most schools. It presents a potential danger to pupils, and the cleaning up and repair cause considerable disruption to schooling and divert janitors and cleaners from their normal duties. Break-ins lead to internal damage to doors and fittings and may lead to the theft or loss of vital equipment. Damage to fences, roofs and external lights is also prevalent (Exhibit 2).

Exhibit 2: Breakdown of the costs of repairing vandalism

Broken glass is the costliest element of vandalism.

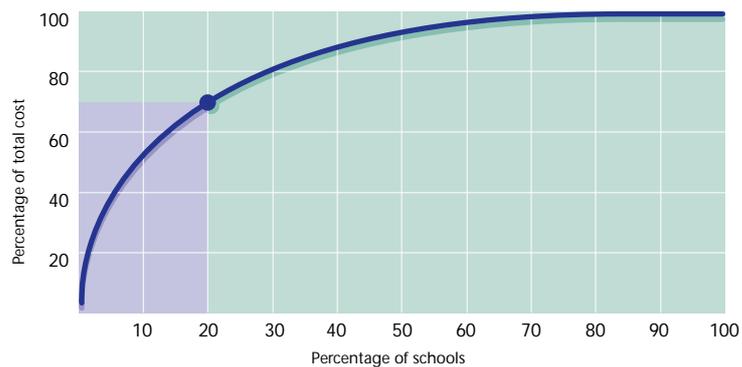


Source: Strathclyde Regional Council, 1994/95.

The risk profile for every school is different. Each school has some losses and the true costs are often underestimated. However, a limited number of schools account for a high proportion of the total cost of vandalism to councils. Exhibit 3 profiles the total cost of vandalism suffered by 1,600 schools in four former education authorities. In each authority, about 20% of schools accounted for 70% of total losses.

Exhibit 3: Profile of school vandalism

The majority of costs are incurred in a limited number of schools.



Source: Regional councils' property repairs databases.

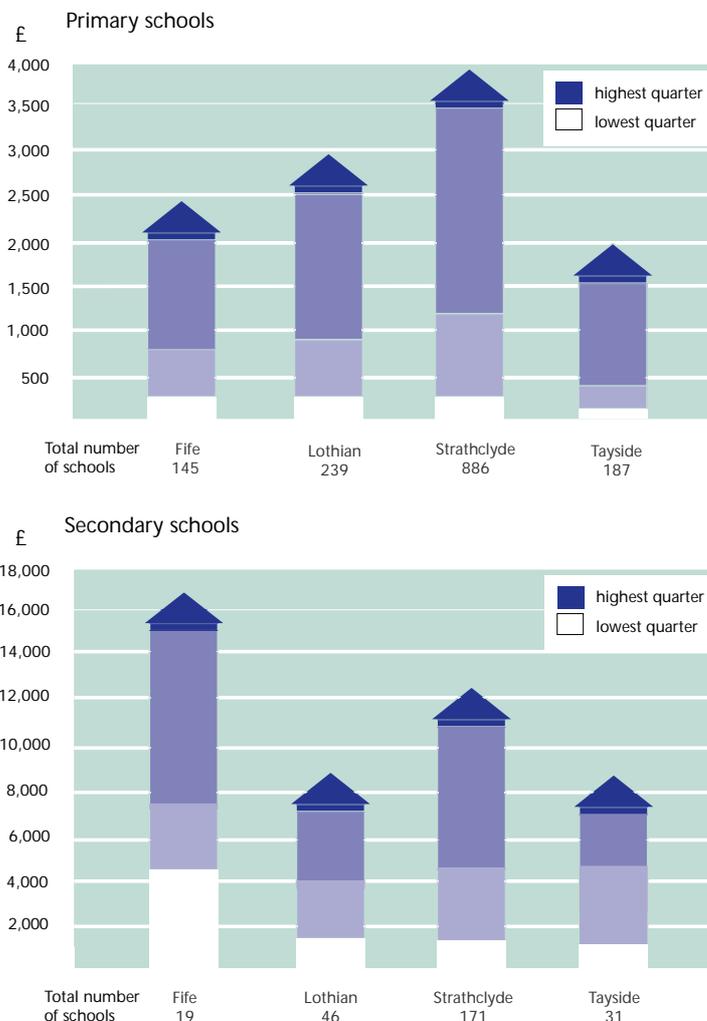
An indication of the extent of the vandalism problem facing certain councils is shown in Exhibit 4. In each of these former councils, the average cost of vandalism per school was greater in the secondary than in the primary sector.

In the primary sector, the problem was most acute in schools within the area of the former Strathclyde Regional Council: more than 220 primary schools suffered vandalism damage exceeding £3,400 a year. In the secondary sector, in over

40 Strathclyde schools, vandalism cost more than £10,800 a year. Fife Council, which has some of the largest secondary schools in Scotland, lost more than £15,000 a year in each of its worst-affected schools.

Exhibit 4: Costs of vandalism in schools – quartile ranges

The most badly affected primary schools are generally found in the area of the former Strathclyde Regional Council.



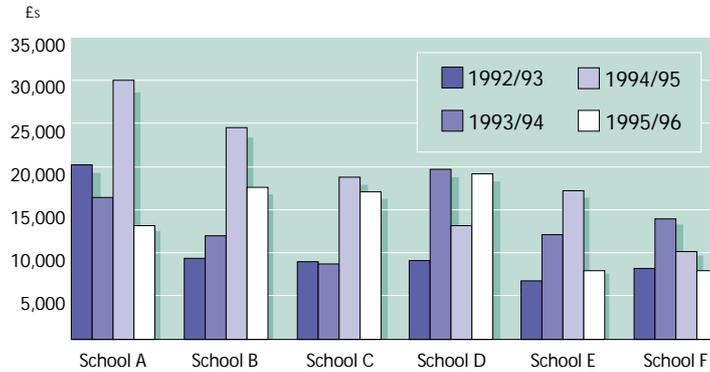
Source: Regional councils' property repairs databases, 1994/95.

It is usually the case that rural schools suffer significantly less vandalism than urban or city schools. For example, in the Scottish Borders, Dumfries and Galloway, and Highland councils, and in the three islands councils, the cost of vandalism is generally not a major issue, with the problem being confined to a small number of, principally, urban schools. Information on vandalism per school was not available from the former Grampian and Central Regional Councils. It is known, however, that in the areas of these former councils, certain schools do suffer from significant vandalism.

Experience shows that vandalism is often directed repeatedly at the same school. Exhibit 5 gives the vandalism experience of six schools in Tayside. The cumulative impact of repeated attacks in these schools is very costly. In the case of school A, a secondary school, the cost amounted to £80,000 over the four-year period.

Exhibit 5: Vandalism in six Tayside schools

The same schools are targeted again and again.



Source: Tayside Regional Council.

Losses from fire

Schools are the principal target of malicious fire-raising. In Strathclyde, about 95% of all fires in regional council properties occurred in schools. Nine out of ten school fires are started deliberately. Although there is no consistent pattern to the location of these fires, many acts of fire-raising can be linked to ease of access to the building and pure opportunism.

Experience shows that the risk of fire and vandalism is significantly increased when a building is unprotected, easily accessible, and unoccupied. Empty schools are vulnerable, particularly when there are no apparent property-protection measures in place. Recently, two teenagers were convicted of causing £400,000 worth of fire damage to a former school building in Aberdeen.

In their report 'Arson in Schools'⁴, the Arson Prevention Bureau identified a strong relationship between fire-raising, vandalism damage and burglary. They concluded that schools which suffer from vandalism should think seriously about their precautions against fire-raising, and take appropriate preventative measures.

Fire-raising attacks on schools are more likely to happen outwith school hours. Information obtained from the Strathclyde Fire Brigade shows that schools are at greatest risk of fire between the hours of 6pm and 11pm (Exhibit 6). There is an increased risk of fires at weekends and during the school holiday periods.

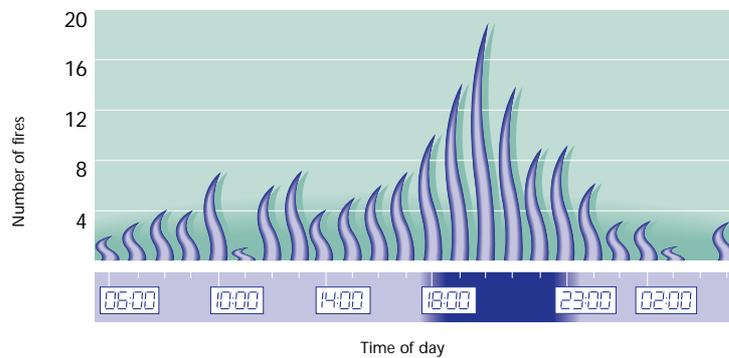
"Vandals, addicts and local youths hide under the cover of darkness. There have been four fires in the last five years."

*Primary school,
City of Glasgow Council.*

⁴ Arson Prevention Bureau (1993) *Arson in Schools*.

Exhibit 6: School fires – periods of greatest risk

The majority of school fires occur between 6pm and 11pm.



Source: Strathclyde Fire Brigade, school fire data, 1995/96.

Most fires result in relatively little damage, although the potential losses can be very high. Between the years 1990/91 and 1995/96, there were 671 fires in Strathclyde schools, resulting in losses totalling almost £15m (Table 3). Most of these losses resulted from a relatively small number of fires, with 10% of fires accounting for 87% of the estimated total losses.

Table 3: Estimated cost of school fires in the Strathclyde area

Estimated cost of individual fires	Number of fires	Percentage of total fires (%)	Total cost of fires (£m)	Percentage of total cost (%)
Under £10,000	550	82.0	1.1	7.4
£10,000-£25,000	54	8.0	0.9	5.8
£25,000-£100,000	45	6.7	2.0	13.9
£100,000- £1m	18	2.7	5.2	35.1
Over £1m	4	0.6	5.6	37.8
Total	671	100.0	14.8	100.0

Source: Strathclyde Regional Council, fire database 1990/91 to 1995/96.

Access to schools

In Scotland, school security and public access to schools have, in recent years, become growing problems. Measures taken to protect the school population need to be distinguished, however, from the related problem of providing protection to school buildings and equipment which may be at risk from vandalism, theft or fire-raising.

A number of head teachers identified their increasing concern about strangers entering their school grounds during the day. More than half of head teachers surveyed identified the need for improved control over access to their school as a priority area for action. Most indicated that the risk was as much a problem during the school day as it was at night and at weekends.

The clear message from head teachers and their staff is that more needs to be done to prevent unauthorised or uncontrolled access to both school grounds and buildings.

The Commission's study identified certain key factors which facilitate unauthorised access to schools. These include:

- a failure to design schools with security in mind
- the lack of an effective perimeter fence around the school
- numerous points of entry, particularly in secondary schools, and the absence of a single, controlled entry point to all areas of the school
- public rights of way cutting across the school campus
- the use of the school during the school day by the community and other users
- the location of reception offices within schools
- the requirement for access by others (eg contractors) during the school day.

"Parents have voiced their concern over the accessibility of the school and its grounds."

*Primary school,
City of Dundee Council.*

School access and school security have taken on a new importance following events at Dunblane Primary School in March 1996, which resulted in great national concern about security and access to schools. Lord Cullen has published his report following the Public Inquiry into the incident. In the aftermath of Dunblane, it is understandable that there should be calls for additional measures to protect the school population and to prevent unauthorised access to schools.

Building design

Poor building design is a factor which increases the risk of property damage in certain schools. The rapid building and modernisation process in the 1960s/70s has left a legacy of design problems. Many schools built at that time do not conform to current building standards. There is, however, no legislative requirement to upgrade these buildings as more recent standards do not apply retrospectively. Certain design features lead to increased risk of property crime:

- expansive areas of glass result in high levels of glass breakage
- accessible flat roofs increase the risk of children climbing onto them, causing damage and injury to themselves
- heavily recessed and hidden areas provide cover for criminal behaviour.

Poorly designed buildings increase the risk of loss as a result of fire. The lack of fire separation within the building and of automatic fire-detection devices often mean that small fires can make undetected progress, resulting in total damage to the building. Inappropriate design, eg flat roofs, has also contributed to a legacy of increased maintenance problems for councils.

3. Managing property risks

Roles and responsibilities

The management of property risks is complex. The types of risks involved are multifaceted. This means that many parties have a potential stake in assisting the council to reduce the risk of loss or damage. In the case of school property-related risks, these stakeholders fall into three main groups: the council, the local school and its community, and other agencies. Box 2 summarises the main parties involved.

Box 2: The key stakeholders in managing property risks

The council	The local school	Other agencies
Councillors	Head teachers	Police
Chief executive	Teachers, helpers and other staff	Fire service
Education service	Janitors	Health and Safety Executive
Property/estates department	Pupils	HM Inspectorate of Schools
Risk manager/insurance section	School board members	Insurance companies
Health and safety officer	Parent-teacher associations (PTA)	
Building control	Parents and the community	

The role of the council

The Commission wanted to identify the extent to which the participating councils had embraced a corporate commitment by establishing a dedicated group to lead and promote property risk management. In most councils studied, specific anti-vandalism groups had been established, mainly in response to a severe vandalism problem. These groups comprised a number of key service managers, and tended to be led by a senior manager from either the education or property services department. The police and fire services often supported the work of these groups. The groups had the following objectives:

- create and maintain a high profile and priority for the reduction of vandalism
- implement a sustained programme of measures to reduce vandalism
- ensure that investment in preventative measures was correctly prioritised
- raise the awareness of pupils, staff and the wider community through an effective programme of education, training and communication
- monitor and report on the effectiveness of measures taken.

Strathclyde Regional Council was one of the few councils found to have established a full corporate risk-management group. Its approach involved four main strategies covering education, public awareness, the physical protection of properties and the monitoring and review of preventative measures taken (Box 3).

Box 3: The approach to vandalism in Strathclyde Regional Council

In the late 1980s, Strathclyde Regional Council gave vandalism a higher profile because of its particularly bad experience at that time. Its anti-vandalism initiative, with the support of the Leader of the Council, included the establishment of a corporate anti-vandalism/ crime group led by the Education Department.

This anti-vandalism group was later developed into a risk-management group, becoming concerned with school security and intrusions into school grounds during the day.

Strathclyde's corporate initiatives involved four interrelated strategies:

- 1 Make young people aware of the serious financial and social effects of vandalism and fire-raising.
- 2 Raise public awareness of vandalism and fire-raising issues.
- 3 Afford buildings a greater degree of physical protection.
- 4 Obtain views on the measures taken to inform future decisions on the targeting of resources.

Source: Strathclyde Regional Council.

The Commission found that the effectiveness of established anti-vandalism and security groups has been constrained by the limited budgets allocated to them, relative to the scale of the problem. Also, in recent years, councils have been unable to maintain the momentum of school-vandalism initiatives, as a large amount of management time has been devoted to local government reorganisation.

Councils have been encouraged by the police to embrace a crime-prevention culture by assuming ownership of their crime problems and taking preventative action. As councils are major victims of crime, an effective response by councils will assist in reducing the level of property crime in their area.

The police offer various crime-prevention initiatives to assist councils to assess and reduce their exposure to crime. Free crime-prevention surveys with security recommendations are available on request. Building design advice from police force architectural liaison officers is also available, free of charge. Likewise, the fire service is very active in offering advice on fire prevention to councils and schools. Councils have not made best use of these services. The take up of police and fire service advice to design out crime from new and refurbished schools has been relatively low and often too late to allow any revisions to be implemented. Councils could do more to prevent crime in new and refurbished schools. The development of a strong link with local crime-prevention initiatives is to be encouraged.

Devolved school management

The education service continues to have responsibility for managing and financing school provision but, under devolved school management (DSM) schemes, head teachers directly manage at least 80% of the school budget. Almost all councils had DSM schemes in place in schools by April 1996.

The extent to which head teachers have direct management control over property maintenance issues varies according to the nature of the DSM scheme in place.

“Vandalism, particularly broken windows, has a huge financial impact – in previous years, up to £12,000. The devolved maintenance budget is only £5,900.”

*Primary school,
City of Edinburgh Council.*

Across the 11 councils surveyed by the Commission, over 80% of head teachers share responsibility (mainly with their council’s central property services function) for managing property-related risks in their school.

In the context of property maintenance, most councils have developed landlord/tenant DSM schemes. The landlord (the council) is responsible for the maintenance and repair of the external fabric of the school. The tenant (the school) is responsible for internal decor and repairs. Under most landlord/tenant schemes, the council meets the cost to schools of out-of-hours vandalism. Each school is required to bear the cost of vandalism and losses from theft arising during school hours.

Councils do not wish to pass complete responsibility for the repair and maintenance of individual schools to their head teachers. Councils see it as their duty to provide, repair and maintain the school infrastructure. In an environment where resources are constrained, councils wish to ensure that they retain control over the prioritisation and targeting of available resources to maintain the building fabric of their schools. Other concerns of council managers regarding landlord/tenant schemes relate to:

- issues regarding the appropriateness and quality of the work carried out at the school’s direct instruction
- ensuring that such work complies with statutory requirements concerning health and safety, fire, building and planning regulations.

The role of the head teacher

Head teachers have responsibility for ensuring effective and efficient delivery of the education service in the individual establishment. In addition, they have delegated responsibility for the health and safety of all pupils, staff and visitors to their school. (Lord Cullen’s report makes it clear, however, that the legal responsibility for health and safety rests with the employer, in this case the council.)

The school has to live with any failure to manage property risks, whether in terms of disruption to teaching, impaired education environment, poor staff morale, or diminished resources for classroom equipment or much-needed building repairs. There is no doubt that head teachers have a key role to play in planning and initiating property risk-management strategies in schools.

In seven out of ten schools where vandalism is a problem, risk-reduction measures feature on the management team agenda. Head teachers also discuss property risk issues with their school board, where one exists (23% of schools surveyed by the Commission do not have a school board). There is little evidence of their networking with other head teachers to share experience of good practice.

Fewer than one in three head teachers has been given relevant training in property risk management, whereas most do receive technical advice on property, energy, and health and safety issues from their council’s support services. They also enlist the support of the police and fire services to enable them to convey the anti-crime message to their school.

Schools have also been the subject of crime-prevention and health and safety audits. Thirty-five per cent of schools have been the subject of a crime-prevention audit in the last three years. In the same period, health and safety audits have been carried out in 70% of schools. It may be of concern that almost one-third of schools have not been the subject of a health and safety audit during the last three years.

When undertaken, these audits result in prioritised recommendations for action. The extent to which councils devolve resources affects the capacity of the school to take action. Head teachers are generally able to implement low-cost measures, which can have a significant impact on reducing risks. For any expensive measure, all schools need to rely on the support of their council.

The role of the janitor

A school janitor has important practical duties concerned with the management of school property risks. Many small rural schools do not have janitors, and in these schools it is the head teacher who is required to respond to any emergency which occurs out of school hours.

Janitors' duties include:

- checking fire alarms, intruder alarms and emergency lighting systems for electrical defects
- initiating procedures for property repairs, and keeping a record of events
- ensuring the efficient operation of heating systems and swimming pools
- supervising the school premises during the day and for school lets
- being responsible for the opening and locking up of the school
- being the main point of contact when the emergency services are called out.

The role of janitors is changing. They are increasingly using more technical equipment such as electronic intruder alarms, sophisticated heating systems and, in certain schools, CCTV systems. In many schools this technological advance has not been accompanied by the training of janitors in the proper use of new equipment. Janitors generally receive little advice and training other than on-the-job experience. Few school janitors have been provided with training on the importance of incident recording and monitoring. Some janitors do not always inform the head teacher of near-miss crime incidents.

Traditionally, janitors have been provided with a tied house within the school grounds but many janitors now prefer to live off-site. Some councils hold the view that the presence of a janitor living in a tied house tends to reduce property-related risks, but this opinion is not universally held.

Pupils' responsibilities

Pupils can have an important role to play in helping their school to minimise property loss or damage. Most primary schools are in the process of implementing national guidelines for environmental studies, as part of pupils' 5-14 development programme. These studies include 'health and safety in the environment'. In many schools, pupils engage in studies which involve exercises about vandalism, fire safety and involvement with the school's community. The police and fire services, in conjunction with their local councils, have developed specific support packages for use in schools (Box 4).

"Our environmental education programme involves regular input from the local police and the litter ranger."

*Primary school,
Perth and Kinross Council.*

Box 4: Anti-crime initiatives developed for schools

- *School Watch*. This scheme's key objective is to encourage primary schoolchildren to enlist the support of the local community in the protection of 'their school'.
- *Vandalism Isn't OK*. An anti-vandalism pack for use in the curriculum for secondary schools.
- *Project Minder*. A community involvement project which encourages the local community, through school-initiated activities, to become involved in the protection of their school.
- *Crucial Crew*. This innovative training package raises Primary 7 children's awareness of hazards in the modern environment, and gives them guidance on safety procedures.
- *SAVE (Strathclyde Anti-Vandalism Education)*. A support package for primary school teachers. It offers advice and ideas on a variety of teaching approaches, to encourage pupils to take a greater interest in their environment, and to appreciate the effects of various forms of vandalism.
- *Police Box*. A joint initiative between Grampian Police and local councils. It is directed at the 5-14 education programme and covers issues including vandalism, law and order, bullying, safety and drug awareness.
- *Junior Crime-prevention Panels*. Pupils are encouraged to assist the school management team in taking decisions affecting their school. Pupils develop an increased ownership of the problem.

Source: Accounts Commission fieldwork.

Financing property risks

Financing property risks is an important element of risk management. The purpose is to reduce the total cost of risk, which includes:

- the amount of uninsured losses, met directly from council resources
- insurance premiums for external insurance cover obtained
- excesses applying to individual claims
- management and administration costs associated with risk and insurance
- preventative measures to reduce risks.

Most Scottish councils used to transfer all of their property risks to insurance companies. In recent years, there has been a move towards self-insurance. Councils now meet the direct cost of low-value, but more frequent and predictable, losses – for example, broken window panes. This has shifted the focus towards how such losses can be controlled or avoided in the future.

A council must determine an appropriate balance between losses that are to be financed through external insurance cover, and losses to be met directly from its own resources (self-insurance). The approach followed will be influenced by the council's capacity to meet the direct cost of exceptional and significant value risks, its loss experience and the commercial rates offered by the insurance market.

Following the reorganisation of local government, the smaller education authorities have less capacity to meet the direct cost of exceptional and costly risks. For these risks, councils negotiate premiums and claims excess levels with their insurers in order to minimise the potential impact of major losses on their budgets. For fire and other perils, individual claims excesses generally range from £25,000 to £50,000.

Information for property risk management

Risk managers require good information about the likely frequency of occurrence of risks, the probability of loss or damage, and the likely severity of loss. Good information on the incidence and cost of past losses will show the trend and pattern. The study revealed, however, that property risk-management information systems in many councils have not been well developed.

Councils rely mainly on their property repairs databases for recording losses, but this approach is flawed for a number of reasons:

- repairs databases do not include losses from theft
- the cost of vandalism is understated where damage is not repaired. (One school visited by the study team had suffered fire damage in an unused classroom, which had been locked up without being repaired)
- repairs are generally classified by trade as opposed to type of vandalism
- some councils do not distinguish vandalism repairs from other property repairs
- not all incidents of vandalism are properly coded
- there is no information available on the incidence of near-misses and the frequency and timing of incidents.

“Considerable money could be saved if more time, effort and analysis were devoted.”

*Secondary school,
Aberdeen City Council.*

Patterns of crimes against school property have generally not been analysed by councils. However, councils have used property maintenance records to identify those schools where vandalism problems are most acute.

Councils consider information on vandalism to be extremely sensitive, mainly because a relatively high level of vandalism reflects badly on the school. For this reason, councils have not generally communicated school vandalism costs to head teachers. Three out of four head teachers surveyed were not informed about the cost of vandalism in their school. The majority would wish to be informed, although it was suggested that the information would be of little use if head teachers were not able to act on it.

Most schools have been collecting local information on vandalism and theft, and schools have also been the subject of crime- and fire-prevention surveys and health and safety risk audits. However, this information has not been brought together to compile a full risk profile for each school.

Exceptionally, the insurance and risk-management section of the former Tayside Regional Council had developed a risk-assessment software system for collating all critical data relating to the Regional Council's risk experience – for example, by service department, by type of risk, by establishment, and by date. Details of property risk incidents were systematically collected from all schools using a standard report form. This information proved very useful in identifying the nature and trend of losses and in assisting its security and anti-vandalism working group to identify those schools suffering the worst vandalism. Strathclyde Regional Council was also in the process of developing a similar system.

4. Risk-reduction measures taken

“Our problem was vandalism associated with attempted or actual break-ins. The security lighting and intruder alarm system have greatly reduced the number of incidents.”

*Secondary school,
Dumfries and Galloway Council.*

Property protection measures

In response to specific vandalism problems, councils have installed protection measures in certain schools – for example, security lighting, intruder alarms and CCTV. Fences and shutters have been installed to deny access to vulnerable external areas of schools. Glazing substitutes (eg polycarbonate) have been used to replace broken glass window panes. The extent to which schools surveyed by the Commission have adopted these and other protection measures is summarised in Table 4.

Table 4: Extent of protection measures in schools

Measure	Primary (%)	Secondary (%)
Fire alarm	100	100
Physical marking of equipment	90	94
Intruder alarm	70	90
Control over contractors' access	62	64
Security lights	53	63
Control over visitors' access	48	56
Glazing substitutes	34	47
Shutters	17	17
Smoke alarms	12	28
CCTV	10	17
Security fencing	9	14
Sprinkler system	3	1
Security guards	1	4

Source: Accounts Commission survey of head teachers.

Councils across Scotland have conducted a number of pilot schemes in schools to evaluate the effectiveness of CCTV and other packages of protection measures but investment has been low at around £1m a year. Reviews of these schemes have confirmed remarkable reductions in crime. Examples of the types of measures taken, together with the savings achieved, are given in Table 5.

Table 5: Successful measures in schools

School type	Measures	Investment (£)	Cost of vandalism		Annual saving (£)	Payback period (Years)
			Before (£ pa)	After (£ pa)		
Primary	Roof access prevention and security screens	2,000	5,500	200	5,300	0.4
Secondary	Window protection and fencing	12,000	9,000	1,500	7,500	1.6
Secondary	CCTV and fencing	45,000	25,200	800	24,400	1.8
Secondary	Improved intruder alarm and security lighting	4,000	3,200	1,300	1,900	2.1
Secondary	Roof protection, security lighting and improved intruder alarm	7,000	6,400	4,500	1,900	3.7

Source: Strathclyde Regional Council.

A review by Grampian Regional Council of a CCTV pilot scheme in one of its secondary schools confirmed a dramatic fall in vandalism costs. The review found that the system paid for itself in three years by reducing the cost of vandalism repairs (Table 6).

Table 6: Reduced vandalism costs in one school

CCTV system installed in July 1991 at a cost of £32,500.	
Financial year	Vandalism repair costs (£)
1989/90	13,800
1990/91	14,835
1991/92	8,150
1992/93	2,650

Source: Grampian Regional Council.

Crime-prevention measures, such as CCTV, security lighting and fencing are expensive. Such significant investment must be properly planned and its impact evaluated. A response appropriate to one school may not be appropriate to another. School users know their buildings best and should always be involved and consulted when formulating a local crime-reduction strategy. However, about 50% of head teachers felt inadequately consulted before measures were taken in their schools. It was also found that janitors were very rarely consulted before decisions were made on the most appropriate action to be taken.

In certain circumstances, the design of a school building prevents the adoption of practical risk-reduction measures. Preventative action may not be taken in schools affected by rationalisation proposals since councils may be unwilling to invest significant sums on security measures in schools which may be closed.

Physical measures are effective only where they are supported by all users of the school (staff, pupils, parents and the community). The formation of self-help or local action groups can support the efforts of the school. Improved awareness is useful in getting users and the community involved in supporting the school's management team. Examples of the ways in which schools have raised awareness of school property crime issues are listed in Table 7.

Table 7: Methods used to promote awareness of crime issues

Method	Primary (%)	Secondary (%)
School newsletter	73	60
Talks to pupils on effects of youth vandalism	66	61
PTA/public meetings	38	24
Staff training on risk identification/prevention	26	29
Guest speakers at school assemblies	23	25
Pupil/teacher anti-vandalism group	20	21
Community action group	12	4

Source: Accounts Commission survey of head teachers.

Fire prevention

Nine out of ten school fires are started deliberately. Often these fires are not serious and burn out with only minimal damage. Major losses do arise, however, and it is important for councils to recognise certain indicators which point to a school being at greater risk of fire, and take appropriate preventative action. In this way, councils can target preventative measures to those schools considered to be most at risk.

Strathclyde Regional Council developed a methodology for identifying specific schools which are most likely to be attacked and the methods of protection which were likely to be the most effective. A risk-assessment checklist was used which applied appropriate weightings to key determining factors:

- crime profile of the local neighbourhood
- incidence of previous acts of vandalism
- combustibility of construction
- existence of recessed doorways
- ease of roof access
- number of areas protected by an intruder alarm.

Using this approach to target the most vulnerable schools for preventative action, Strathclyde Regional Council was successful in reducing the incidence and cost of malicious fires at schools. Between the years 1990/91 and 1992/93, the number of malicious fires was reduced and the cost of repairs was halved from the £5m incurred in 1990/91.

Approximately 50% of primary schools and 70% of secondary schools have a working relationship with their local fire brigade. This assists head teachers in taking steps to avoid the risk of fire, but recommendations for fire prevention can be ignored because of the costs. The fire service has no powers to enforce its advice.

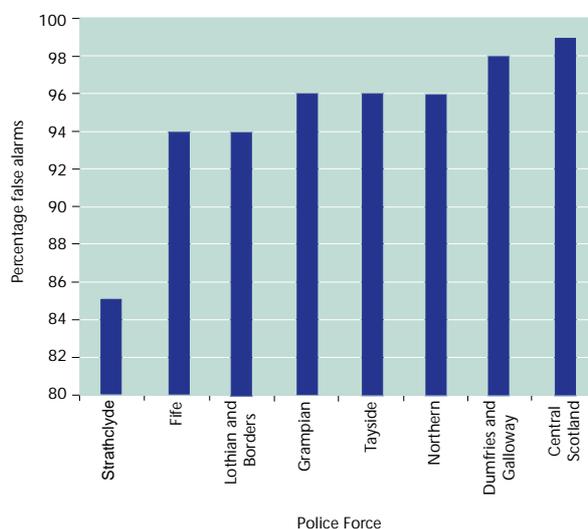
Intruder alarms

Intruder alarms have been installed in 70% of primary and 90% of secondary schools. In most schools, alarm protection is provided only in those rooms at greatest risk from theft – for example, computer resource learning centres and music rooms. School corridors are generally fitted with alarm sensors to restrict the extent of any intruder's undetected movement within the school. Intruder alarms may be stand-alone, or they may be hard-wired to a control centre operated by a private alarm company.

The police respond to around 300,000 alarm calls every year across all types of property, costing them over £10m in police officer time. About 90% of intruder alarm calls are false. Schools account for 10% of all false alarm calls, costing police forces in Scotland about £1m a year. Exhibit 7 gives the rate of false alarm calls by police force.

Exhibit 7: Levels of false intruder alarm calls, 1995

About 90% of calls waste police resources.



Source: Accounts Commission fieldwork.

In addition to the waste of police resources, false alarms result in councils incurring additional costs in the form of janitorial overtime and engineers' charges for attending to and resetting activated alarms.

The key factors which give rise to false alarms are:

- system faults. Tayside police identified that system failures accounted for 70% of false alarm calls in their area
- lack of staff training in the use of alarms
- poor quality of alarm installed
- problems with alarm installation and systems design.

Councils should monitor intruder alarm activations and ensure that measures are taken to reduce false alarm calls. This will produce financial savings both to councils and to other services, notably the police. Councils should be made aware that, in response to this problem, the Association of Chief Police Officers in Scotland is currently reviewing Scottish Police Service policy on alarm response.

Monitoring and review

With the exception of pilot schemes, councils have not conducted systematic analysis of vandalism repair costs by school to measure the extent to which individual risk-reduction measures have been successful. Without any effective monitoring and review mechanisms, councils cannot present a financial case for investing in further measures.

After implementation, it is important that the experience of vandalism continues to be monitored to identify any weaknesses which may be undermining the effectiveness of measures taken. Strathclyde Regional Council's review of several CCTV installations confirmed that many benefits were obtained, but it also identified weaknesses to be addressed (Box 5).

Box 5: Post-implementation review of CCTV in Strathclyde

Benefits	Weaknesses
Very effective deterrent.	Location allows pupils to alter the angle of the cameras.
Allows supervision of internal areas and reduces internal vandalism.	Existence of blind spots.
Very effective at monitoring playground behaviour.	Lack of zoom facility.
Increases feeling of security.	Lack of picture clarity.
Cuts playground bullying and fights.	Absence of training in its use.
Improved protection against intruders.	Extra physical measures required, eg fencing.

Source: Strathclyde Regional Council.

Installation of CCTV dramatically reduced previous security and vandalism problems, and was an effective tool for supervising pupil behaviour. Problems were the poor positioning of the cameras and poor picture quality, which did not allow the system to be used for detection purposes. These shortcomings could be overcome with improved, but relatively more expensive, CCTV systems.

In Strathclyde, a quality control team was involved in monitoring and evaluating measures undertaken to reduce vandalism in 57 schools. The review involved meetings and interviews with members of the anti-vandalism standing committee, officers from the education, property and architects departments, school board representatives, head teachers, teaching and janitorial staff and pupils. The quality team's review identified particular shortcomings in the measures taken (Box 6).

Box 6: Strathclyde's review of its anti-vandalism programme

Identified shortcoming	Recommended action
<p>Strategic planning</p> <ul style="list-style-type: none"> • Wide variation in the way that establishments had been targeted for preventative action. 	<ul style="list-style-type: none"> • Important that the council takes a strategic overview across all schools to ensure that resources are properly focused and well managed.
<p>Communication and consultation</p> <ul style="list-style-type: none"> • More needed to be done to make pupils, parents and staff aware of the problem. 	<ul style="list-style-type: none"> • Produce an information leaflet highlighting the damage that vandalism is having on the education service. • Need for greater openness and communication between schools and the local education authority.
<p>Choice of physical measures</p> <ul style="list-style-type: none"> • Need for clearer advice and guidance on the use of physical measures and adoption of suitable anti-vandalism schemes. • Well-intentioned efforts to encourage ownership by allowing schools to submit their own bids without a pre-set cash limit had led, in some instances, to a misplaced anticipation of what could realistically be achieved. 	<ul style="list-style-type: none"> • So that proposals might be realistic, schools, in partnership with other agencies, should be made aware of: <ul style="list-style-type: none"> – costs of vandalism for their school – the total amount of money that is available for preventative measures for all schools – effective measures, which they should match with the needs of their school – where to seek advice on preventative measures, eg police.
<p>Quality of programmes</p> <ul style="list-style-type: none"> • Promised work had not always been completed, often leading to the discontentment of many head teachers and school boards. • Funds were sometimes re-routed to other projects without consulting those involved. • Some preventative programmes did not identify objectives, for example, fencing was erected without clarity about its function – in the wrong location, at the wrong height, and was often less effective because only a section of the area was protected. 	<ul style="list-style-type: none"> • Clear specifications should be approved before the work is started. • Schools should be given a realistic timescale for completion of the work, which should be adhered to. • Any re-routing of funds should be done only after full consultation with those involved. • Schools should have the opportunity to discuss the design proposals so that their potential effectiveness is maximised. • Proposals should be scrutinised so that potential problems can be designed out.
<p>Vandalism Information</p> <ul style="list-style-type: none"> • Schools with relatively high vandalism experience were targeted for specific preventative action. However, head teachers did not know the cost of vandalism for their schools and it was not communicated to them. 	<ul style="list-style-type: none"> • Schools should receive timely information on vandalism costs. • This information should heighten the sense of responsibility within schools, increase motivation to reduce vandalism, and promote the sharing of constructive ideas.
<p>Involvement of school board and other groups</p> <ul style="list-style-type: none"> • In general, the participation of the school board was limited. For the most part, the board was simply informed of what had been decided. • The involvement of the local police was variable. 	<ul style="list-style-type: none"> • The school board should be more actively involved. Their increased awareness should lead to meetings seeking the support of councillors and police crime-prevention officers. • All partners in the scheme should be given an active role to encourage a corporate approach. <p style="text-align: right;">Source: Strathclyde Regional Council.</p>

Strathclyde’s quality team found that, in the majority of schools, the additional security measures had had a positive effect among parents and staff in raising the profile of the problems of vandalism. The team also assessed the effectiveness of each of the specific measures adopted. Their findings will be of interest to other councils (Box 7).

Box 7: Strathclyde’s assessment of the effectiveness of specific security measures

Physical measures	Quality team’s review findings
Security lighting and alarm systems	<p>Felt to be highly effective measures by the majority of establishments. They require careful consideration in terms of siting and design, including the use of timing devices.</p> <p>Alarm systems are becoming more effective and reliable, and when combined with effective perimeter fencing and lighting, are proving to be successful.</p>
Polycarbonate window panes	<p>Found to be effective, with the reservation that they can be spray-painted, or easily scored, leading to an unpleasant appearance.</p> <p>Significantly, schools which made an attempt to improve the external appearance of their buildings claimed this to be a successful measure in the continuing battle to prevent vandalism.</p>
Security fencing	<p>The effectiveness of fencing has been more controversial. In some cases, it has helped the pupils to feel more secure but, in general, has not been successful in keeping vandals out, mainly because of poor planning and design of the fencing installed.</p> <p>The effectiveness of fencing needs to be reviewed alongside council policy on whether to lock perimeter gates outwith school hours.</p>
Roof access deterrents	<p>Some success, but seen as a challenge to vandals. In many instances the problems have simply transferred to another part of the building.</p>
Door and window grilles	<p>While not enhancing the appearance of the building, grilles were nevertheless effective in preventing some serious incidents of vandalism.</p> <p>Some grilles have been used effectively to prevent access to particular areas of buildings where youths tend to congregate. However, careful regard of the fire regulations must be taken concerning the design of door grilles.</p>
Designing out	<p>This continues to be one of the most effective measures and applies to both new and existing buildings. In the latter case, it has involved the removal of shielded doorways, provision of shutters at vulnerable access points, and the protection of low roof edges to reduce access.</p> <p style="text-align: right;">Source: Strathclyde Regional Council.</p>

5. The problem of resources

“It is vitally important to address vandalism without delay.”

*Secondary school,
Fife Council.*

Identifying and financing appropriate solutions

This study has identified that the total cost to councils of school property crime and its prevention is at least £18m a year (Table 2, page 11). There is a significant opportunity cost to councils, both in financial and non-financial terms, if effective action is not taken to reduce their losses.

The study has shown that, to manage property risks in schools, councils need to allocate resources to:

- install physical measures to protect the most vandalised schools
- put in place access controls to protect the school population
- meet health and safety requirements in schools
- reduce the school building maintenance backlog
- improve their management information systems to enable them to manage their risks more effectively.

The financial case for protecting school buildings and equipment which are at risk of vandalism, theft or fire-raising needs to be distinguished from the arguments for taking measures to protect the school population. This chapter of the report presents a financial case supporting the view that councils should take action to reduce vandalism in schools significantly. It also discusses the complexities of deciding an appropriate level of funding for the separate, but related, problem of addressing the safety of the school population.

Protecting school buildings from property crime

Councils should implement effective risk-management strategies to reduce property crime. These will require a sustained level of investment involving the installation of physical measures in targeted schools and will have to be supported by relevant training and education. Pilot schemes by councils have been very successful, many with payback periods of less than three years. Councils should, therefore, benefit from reduced revenue expenditure within a few years as the costs of vandalism reduce.

Experts recognise that there may be instances where protection measures installed in a school displace crime to a nearby school which is less well protected. This needs to be recognised in planning protective measures but does not undermine the case for investment.

The study has found that the costs of vandalism and fire are heavily concentrated in schools in urban areas. In most areas, 20% of schools account for 70% of total losses. A strategy targeted at these worst-affected schools would significantly reduce the cost of property-related crime.

If we assume a three-year payback and a four-year programme investing £4m a year targeted at the worst-affected schools, annual losses from property crime could fall from £12m to less than £7m within four years. Details of the calculation are provided in Box 8. In addition, funding of ad hoc protection measures such as polycarbonate windows and window grilles could be reduced because the investment in crime-prevention packages would reduce the need for them. The £4m annual investment to finance this programme is four times the amount invested in crime-prevention packages by Scottish councils in 1994/95.

Box 8: An illustrative investment programme to reduce councils' losses from property crime

The objective would be to reduce the total cost of vandalism and fire by £5m within four years by addressing the problem in the 20% of schools that are worst affected.
 Assumptions: sustained investment over four years, with the investment being concentrated at the beginning of each financial year for the purposes of illustration. Measures installed meet an average payback of three years.

Schedule of investment and outcomes – three-year payback

Year	Investment (£m)	Reduction in losses from previous year (£m)	Annual losses from vandalism and fire (£m)	Total cost (investment plus losses) (£m)	Net savings relative to year 0 (£m)
0	-	-	12.0	12.0	-
1	4	1.3	10.7	14.7	(2.7)
2	4	1.3	9.4	13.4	(1.4)
3	4	1.3	8.1	12.1	(0.1)
4	4	1.3	6.8	10.8	1.2

The illustration in Box 8 is a conservative estimate of the speed with which savings could be achieved because, in some cases, paybacks of one year are feasible, particularly in the worst-affected schools. Some councils might even find that the first year of a programme is self-financing.

Protecting the school population

The objective of improving the security in schools is to provide a safe and secure learning environment, and to give assurance to the pupils, parents, staff and members of the community involved in the life of schools.

How much needs to be spent on security? The answer can be determined only through democratic means, because the need has to be weighed against competing priorities for expenditure in other areas.

All councils will be looking to protect their schools. They will review the options available, each having different cost implications. The Department for Education and Employment (DfEE) has published a booklet, 'Improving Security in Schools'⁵, which contains advice to education authorities on managing risks and on possible security measures. It also gives advice on carrying out security risk assessment surveys.

We believe there should be an information network established to exchange and promote ideas on the good practice initiatives adopted by councils. In this way, councils can benefit from the experience of others and avoid costly mistakes. COSLA may wish to take the lead role, and the Commission would be willing to support such an initiative.

“Whatever measures are to be taken it is unrealistic to expect that the risk of a violent intruder gaining access to a school can be eliminated. All that can be done is to take whatever measures are reasonably practicable.”

*The Hon. Lord Cullen,
 The Public Inquiry
 into the Shootings
 at Dunblane Primary
 School on 13 March 1996.*

⁵ Department for Education and Employment (1996) *Managing school facilities guide 4: Improving Security in Schools*, HMSO

Risk assessments will determine the best solution relevant to the circumstances of each school. The cost may vary significantly between schools and will depend on the measure(s) selected as being the most appropriate for each school. Box 9 gives examples of the types of quotations being received by councils for CCTV and other prevention measures.

Box 9: Illustrative costs of CCTV and related security measures

CCTV

Primary school (120 pupils)

Eight colour cameras fitted to four 8m poles. The system includes colour monitor, multiplexer, and video recorder. **Cost £28,000.**

Primary school (280 pupils)

Thirteen colour cameras, some mounted on 8m poles with lighting. The system includes colour monitor, multiplexer and video recorder. **Cost £21,000.**

Primary school (400 pupils)

Purchase of a camera kit, mounted by the pupils' main rear entry door, and monitoring equipment in the janitor's office. **Cost £4,260.**

Primary school (400 pupils)

Camera kits mounted by the pupils' main rear entrances (two), and at the hall entrance. **Cost £9,795.**

Secondary school, three-storey building (950 pupils)

CCTV and security lighting. Eleven cameras attached to the existing building and 16 cameras fitted on new ground poles. The system includes a colour monitor, multiplexer and a video recorder. The system uses luminaires which are operated by a passive infra-red detector. **Cost £48,000.**

External lighting (primary school)

Installation of luminaires and bollards, mounted on 4m poles, light-sensitive and able to be altered by school management to suit their requirements. **Cost £10,000.**

Security system (secondary school)

The system includes 97 sensors, door contacts, autodialler, keypad and two external sounder and flasher units. All ground-floor classrooms, corridors and stairwells are protected as well as other vulnerable areas. **Cost £8,500.**

Door entry system (primary school)

Entry controlled by means of a digital lock. The system is integrated into the building's fire alarm, so that in the event of a fire, the lock is overridden to enable safe passage of the building occupants. **Cost £1,250.** In addition, replacement of existing ironmongery required. **Cost £550.**

Source: COSLA.

Not all risk-reduction measures require large expenditure. Revised health and safety procedures can significantly reduce risks at no cost. Most schools are able to fund minor adaptations from their devolved school budgets. In certain situations, a lot can be achieved from modest investment.

In considering the strengthening of security, it is also important to recognise that more than half of the schools which we surveyed had measures in place designed to control the access of visitors and contractors to their buildings. Also, it should be recognised that certain measures taken to protect school property from crime, for example CCTV, can also be designed to improve access controls.

However, in many schools not designed with access security in mind, substantial physical adaptations would be required to provide controlled access. Effective school security programmes in these schools would require significant resources.

It is important to obtain the views of the head teachers. Our survey found that in both primary and secondary schools, head teachers suggested the same priorities. In the primary sector, head teachers' major concern was the need to improve control over access to the school. In the secondary sector, the priority expressed by almost half of all head teachers was to install or upgrade a CCTV system in their school (Box 10).

Box 10: Key priority areas in the views of head teachers

Primary schools
<ul style="list-style-type: none">• improve control over access to the school (59%)• address building maintenance issues (31%)• improve/upgrade existing alarms (20%)• install locks on windows and doors (17%)• install/upgrade CCTV (13%).
Secondary schools
<ul style="list-style-type: none">• install/upgrade CCTV (49%)• improve control over access to the school (45%)• address building maintenance issues (31%)• improve/upgrade existing alarms (18%)• install locks on windows and doors (11%).

Source: Accounts Commission survey of head teachers.

If we assume that these head teachers' views were to be supported by a full risk assessment and are representative of most Scottish schools, around 300 primary schools (13% of 2,300) and 200 secondary schools (49% of 400) would be targeted for the installation or upgrading of CCTV. To finance this might cost some £10m (say, an average of £15,000 per primary school and £30,000 per secondary school). The remaining 2,200 primary and secondary schools, and the special and nursery schools, would also be looking to their councils to review and take appropriate action to improve the safety of their establishments.

The Secretary of State for Scotland has announced that provision has been made for expenditure by education authorities amounting to £33.3m over the next three years to improve security in schools. This expenditure will be supported by a specific grant from The Scottish Office of £25m: £10m for each of the financial years 1997/98 and 1998/99, and £5m for the year 1999/2000. Councils will need to contribute 25% of the total cost.

The introduction of a specific grant will obviously be helpful to councils. In general terms, the Government wishes authorities to have as much flexibility as possible regarding the range of measures that the grant should support, but considers that measures should be identified following reviews of security, as recommended by both Lord Cullen and the DfEE Working Group on School Security ⁶.

⁶ Department for Education and Employment (1996) *Report of the Working Group on School Security*.

Other external sources of finance may include:

- The Closed-Circuit Television Challenge Competition. The Scottish Office is making a competition fund available (£1m in the year 1996/97; £1.5m in 1997/98) to support 50% of the capital costs of the development of CCTV. Schools are eligible to apply.
- Partnership with the private sector. One school surveyed by the Commission had secured funding assistance from a private sponsor.

Councils will still need to find money from their own resources. Some councils, especially in urban areas, have the opportunity to release funds by removing surplus school places. Our report, 'Room for Learning', identified disposable surplus capacity in schools which would realise recurring annual revenue savings totalling around £25m. The avoidance of outstanding maintenance requirements in these schools would save a further one-off £20m. While some councils have already taken steps to dispose of their surplus school capacity, others have tackled this issue with less vigour.

Councils face difficult choices concerning their use of limited resources. In stark terms, what matters more – school security and the quality of education, or keeping unneeded schools open? Our study has shown that protective measures to prevent vandalism and improve security *do* work, particularly when the school and its community are involved. Councils must take further action.

6. Securing action

The Commission wishes to assist councils in developing an effective approach to the management of property risks in schools. Our study has confirmed that some of the former local education authorities had made progress in adopting targeted measures to combat vandalism and improve security in schools. An important challenge for the new councils is to learn from these initiatives.

“Pupils and staff deserve, and work better in, a good environment.”

*Secondary school,
City of Glasgow Council.*

This chapter sets out the key issues which councils will have to address if they are to safeguard the learning environment in vulnerable schools and reduce the avoidable losses which they have been sustaining. Councils require to:

- adopt an organisational commitment to risk management
- improve risk-management education, training and awareness
- identify specific risk areas
- develop effective information systems
- design crime out of schools
- provide corporate support for local solutions
- improve control over access to schools
- install physical measures to protect schools from crime.

A summary of the Commission’s key report recommendations follows this chapter.

Adopt an organisational commitment to risk management

Commitment to tackling the identified problems must be demonstrated by councillors, senior managers and the local head teacher.

Without councils’ commitment and support, financial and otherwise, head teachers will not be able to manage risks locally. An effective partnership should be established in which each head teacher understands his/her risk-management responsibilities and knows where appropriate technical and specialist advice can be obtained when required.

The role of the councillor

Councillors have a key role to play in ensuring that risks are managed more effectively. They should approve a policy statement to guide the overall programme, covering issues such as objectives and timescale for their achievement, projected levels of investment and criteria for selecting schools for the programme of measures. They should also call for monitoring reports, at least annually, on the effectiveness of council action.

The role of the council

Property is but one of a number of risk areas facing the new councils. For this reason, the Commission recommends that all of the new councils should establish a corporate strategy for managing council risks. The City of Dundee Council is an example of a council that has already taken major steps in this area. Building on the work of the former Tayside Regional Council, it has approved its corporate risk-management objectives and strategy (Box 11). A core risk group will lead the council’s strategic management of risks and be allocated a dedicated budget. It will comprise council managers from property, finance, health and safety, legal, and insurance and risk-management services. The police and fire services are also to be represented in the group.

Box 11: Risk-management group's objectives – City of Dundee Council

- Assist, support and encourage risk-management activity within departments.
- Provide a point of reference for risk-management activity.
- Promote a coordinated approach, proactively sharing the information available.
- Establish priorities for loss control and target resources accordingly.
- Ensure that adequate risk funding is available to support managers and staff in their efforts to manage risks effectively.
- Monitor the effectiveness of activities and report regularly to chief officers and councillors on progress.

Reporting to this group will be a number of sub-groups which will be tasked to address specific risk issues. For example, one sub-group is looking at anti-vandalism and security measures in schools. The City of Dundee's approach reflects the risk-management structure being considered by most councils.

Senior officers manage the implementation of council strategies. They are responsible for ensuring that satisfactory arrangements are in place to deliver targeted performance. There are certain key actions which will assist managers to develop effective arrangements for managing school property risks. These include raising awareness, allocating responsibility, identifying problems and appropriate solutions, and monitoring performance. Box 12 highlights the key actions for success.

Box 12: Property risk management – key council actions

Raise the profile of property risk management by:

- ensuring that councillors lead the council's commitment to managing property risk
- creating awareness of school property risk issues
- seeking positive publicity that will encourage all departments to adopt the school property risk-management approach.

Allocate responsibility by:

- appointing an officer (risk manager) with delegated responsibility to champion the cause
- organising a working group to tackle the identified problem areas
- convincing every school and its community to develop ownership of the problem.

Identify the priority problem areas by:

- maintaining a centralised computer database of school risk experiences.

Ensure that action taken is appropriate by:

- consulting with schools when formulating solutions
- adopting a multi-agency approach, making effective use of the support and advice available from the police, fire service and other relevant agencies
- providing technical advice and support to schools
- ensuring that any physical measures taken by schools conform to acceptable quality standards and do not conflict with health and safety requirements
- targeting available financial support to schools most at risk
- ensuring that action taken is commensurate with the scale of the risk.

Ensure that the desired objectives are achieved by:

- calling for reports on actual versus targeted performance.

Momentum has been lost in councils' development of effective property risk-management arrangements during local government reorganisation. The number of local education authorities has increased from 12 to 32 and the new councils should be looking to establish, at an early stage, partnerships with their local police and fire services, in their fight against losses and damage as a result of property crime.

“With efficient management, good liaison and prompt response to risks, problems are minimised.”

*Primary school,
Aberdeen City Council.*

The role of the head teacher

Head teachers have a key role to play in championing the cause of property risk management in their schools. Assisted by their management team, staff, janitor and school board they are well placed to promote a culture within their schools which encourages respect for both school and personal property. With the support of pupils, parents and visitors to the school, significant steps can be taken to minimise the opportunity for school property crime and unauthorised access to the school.

In schools where property risks are a problem, the head teacher has an important role to play in leading the school's commitment to resolving the problem. Box 13 identifies the key issues.

Box 13: The head teacher's role in reducing school property risks

- Identify and gain acceptance that there is a problem and encourage a belief that it is solvable.
- Address the issue through the agenda of the school board, the parent-teacher association, and in the school's development plan.
- Establish good liaison with the police, fire service, and other professional and technical advisers.
- Involve all teaching and non-teaching staff in discussing, and in taking action to tackle, the problem.
- Together with the local education authority, arrange the installation of well-proven measures.

Improve risk-management education, training and awareness

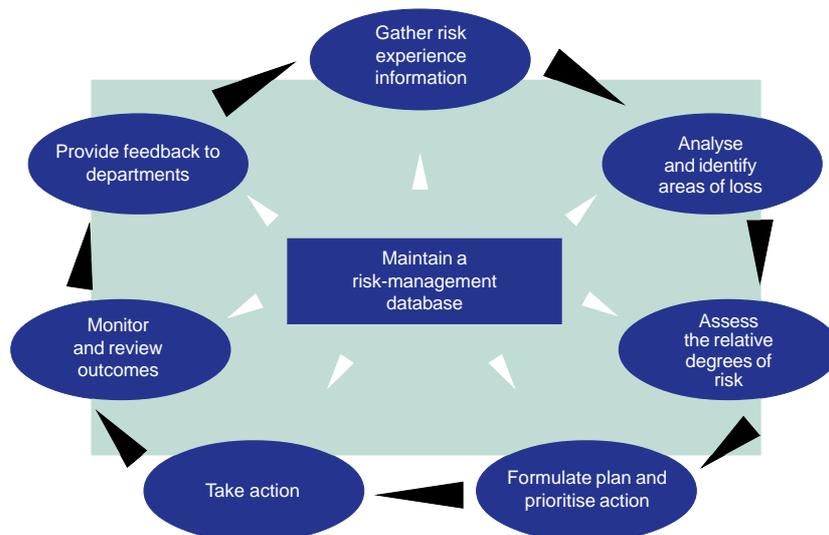
The concept of risk management is relatively new and is not always well understood by staff. Risk management is at the heart of loss reduction and control. It involves certain key processes (Exhibit 8), the importance of which should be covered within councils' risk-management education and training programmes.

For the management of property risks to be effective, everyone involved must understand their role and what is expected of them. This will require a programme of risk-management education and training across the council.

At the corporate level, training courses should involve councillors and key officers who have responsibility for leading the council's commitment to managing property risks.

Exhibit 8: The risk-management framework

Risk management involves certain key processes.



At the local level, the head teacher should lead the school's commitment to reducing property-related risks and be supported by all building users. Head teachers need training in risk management if they are to extend risk-management expertise to their school's management team and then to all members of staff. The Commission recommends that councils should ensure that all teaching and support staff receive risk-management training on appointment and then at regular intervals as part of their in-service training.

School janitors have the key responsibility for undertaking the physical tasks associated with the management of school property risks. A well-trained and committed janitor can make an important contribution to the effective management of risks. In an environment where janitors are increasingly responsible for more sophisticated and expensive technology, it is imperative that councils provide them with adequate training. Otherwise, councils' investment in improved technology may be wasted.

"The problem would be much more significant if all the staff were not conscientious in teaching pupils correct values."

*Primary school,
City of Glasgow Council.*

As part of their curriculum course work, many primary school pupils are involved in discussions and role-playing exercises which raise their awareness of the financial, social, and environmental costs of vandalism and crime. A lot of work has been done nationally by the police and fire services in assisting primary schools to develop effective educational initiatives. But there is little evidence of the anti-crime message being communicated to secondary school pupils. The Commission believes that scope remains for councils to reinforce the anti-crime message in the secondary school environment through the 5-14 development programme. The potential benefits of effective anti-crime education programmes extend beyond schools into the wider community and should not be underestimated.

Most councils have provided schools with written support and guidance material, but this has not always been used. Some head teachers were critical of the volume of information and the relevance of some of it to their particular school, especially technical guidance concerning health and safety issues. Councils should limit guidance to that which is relevant to schools. They should also ensure that contingency planning arrangements, guidance and advice to schools are kept up-to-date.

Identify specific risk areas

Before any programme of action is established, it is important that councils identify their schools that are most at risk. But many of the new councils do not have robust information on their schools' experience of property risk. To remedy this position, some councils are already undertaking a programme of risk assessment in all of their schools to identify key risk areas.

Councils should try to build on the information on school property risks maintained by the former local education authorities for their areas. The Angus, City of Dundee, and Perth and Kinross Councils have benefited from the disaggregation of the former Tayside Regional Council's risk-management database. Similar opportunities exist for other new councils – for example, in the former council areas of Strathclyde and Lothian. The 11 councils that participated in the Commission's fieldwork will wish to use the detailed output provided to them by the study team to develop an improved picture of the risks facing individual schools.

Changing circumstances affect the degree of risk; for example, the introduction of new computers in schools increases the overall risk of theft. Councils need to take action on security before new equipment is installed.

We have found that broken windows are by far the most common form of vandalism in most schools. The worst-affected schools also tend to suffer repeat victimisation, which accumulates to produce a very expensive bill for vandalism.

In addition to the problem of vandalism, schools have been shown to be at risk from other crimes, notably fire, break-ins and theft. As part of this study, we arranged for full fire and risk assessments for six schools with different characteristics (that is, type of school, building construction and design). These surveys identified seven common areas of weakness which councils ought to address:

- inadequate coverage of intruder alarm system
- failure to mark all valuable school equipment
- absence of secure rooms for holding valuable equipment
- incomplete physical protection of the school
- lack of effective control over visitors' access
- fire risks from storing bulk refuse adjacent to the school
- insufficient fire-prevention measures.

Develop effective information systems

Good-quality information is fundamental to the effective selection and prioritisation of future action. Councils almost exclusively rely on property-maintenance finance systems to provide information on vandalism costs. These do not provide the full picture. Any cost-benefit calculation is, therefore, not complete. Councils need more objective data to assess the nature and extent of the problems facing individual schools. They need to develop centralised computer databases which collate all the experiences of property risk, including how, where and when each event occurred, for each school. Councils should introduce formalised arrangements for collating school data, producing a risk profile for each school.

The types of risks should include:

- broken windows
- graffiti
- fire-raising
- acts of theft
- break-ins
- other acts of vandalism
- near-miss incidents.

This level of information is invaluable in developing trend information on the incidence and cost of losses, and for identifying risks that can be avoided by taking effective action.

Most schools currently maintain a lot of valuable information on the timing and nature of individual incidents resulting in loss or damage. To ensure that the profiles are prepared on a consistent and complete basis, councils will need to provide guidance on the various elements of information to be gathered.

Information should meet the needs of those who can take effective action. In the case of property-related risks, timely information should be reported to the council's risk manager, members of the council's risk-management group, senior managers in the education service and to the local head teacher. In addition, councillors should be kept informed of the council's progress in reducing property-related risks in schools.

The Commission believes that there is value in councils sharing their property risk information with their key partners, most notably the police and fire services. In this way, all the parties concerned can target their own resources to reduce losses in those schools at greatest risk.

Design crime out of schools

Poor building design is a major factor that increases property risks. The mistakes of the past – expansive areas of glass, flat roofs, alcoves, and recesses – must be avoided in the future.

Risk assessment should be an integral element of school building planning and design, including refurbishment projects. Account should be taken of the crime profile of the neighbouring area of the school. In areas of identified risk, provision should be made for the installation of preventative measures to reduce the school's exposure to likely loss or damage.

During any major refurbishment, councils should take the opportunity to design out crime. Experience shows that it is more cost-effective to fit preventative measures such as electronic alarms and sprinkler systems during the building construction process, rather than retrospectively.

Council managers need to recognise that good design contributes significantly to reducing property risks. They should look to ensure that they obtain best advice by drawing on the significant expertise of the police and fire services in designing crime out of schools.

The police actively promote their 'Secured by Design' initiative, which encourages designers and developers to apply police recommendations for the security of new and refurbished properties. While this award scheme relates to home, estate and commercial properties, it covers critical areas of design and physical security which are equally relevant to schools. Councils should embrace the crime-prevention standards set out in the 'Secured by Design' scheme when designing new and refurbished schools.

“Recent refurbishment has eliminated many problems and established a school environment which is relatively risk-free.”

*Secondary school,
West Lothian Council.*

The police and fire services are willing to provide architectural liaison advice free of charge, but neither has any statutory powers over school building designs. Also, building control regulations do not require councils to provide for adequate security measures when submitting plans for the major refurbishment or the building of new schools. Councils should adopt voluntary arrangements to ensure that the relevant professional disciplines are always consulted at the earliest stages of the building planning process.

For this process to be effective, councils should include within their building design and planning processes a requirement to consult early with the police and fire services. Without such arrangements, councils cannot be confident that they have always rigorously reviewed their building plans and taken reasonable measures to design crime out of new or refurbished schools.

Provide corporate support for local solutions

Every school is different. There can be no model solution. School users know their buildings best and for this reason the head teacher and the janitor should be involved in important decisions designed to improve the security of their school. In the past, it appears that some councils have taken action without consulting the school. Such lack of consultation has resulted in schools failing to develop ownership of the problems, leading to a lack of resolve to tackle the problems in the long term. Moreover, if an appropriate local solution is to be found, it requires action to tackle the cause rather than the effect. This can be done only by consulting building users.

Experience has shown that the installation of physical measures alone will not reduce property-related risks. To have the prospect of real improvement, a crime-response strategy needs the commitment of the school and its community, adequately supported by the council.

Improve control over access to schools

Schools are intended to be a community asset. There is no desire to turn schools into fortresses. Both Lord Cullen and the DfEE Working Group on School Security explicitly endorsed that schools should not become fortresses and recognised that there is a need for balance. This view was supported by the Government's responses to both these reports.

Nevertheless, the clear message from head teachers and their staff is that more needs to be done to prevent unauthorised or uncontrolled access to both school grounds and buildings. In response to the Dunblane incident, and the findings of Lord Cullen's Public Inquiry, all councils will wish to assure pupils, parents, staff and other users that they have satisfactory arrangements in place to prevent entry into their school by intruders.

The Government supports Lord Cullen's recommendation that councils should formulate a safety policy which provides for a strategy and action plan for each school which would be based on a risk assessment relating to its particular features. The Accounts Commission wishes to assist councils to implement this recommendation by identifying the relevant issues for councils to consider.

Physical security measures for schools should always be part of the anti-crime package to protect the physical structure of the school and its contents, and to provide a safe environment for the pupils, staff and members of the community who use its facilities. In any strengthening of security arrangements, it is important that a balance is struck to ensure that schools remain attractive, welcoming buildings which encourage involvement in the education process and do not deter the community from making use of school facilities.

When reviewing arrangements to control access to school buildings, the first step for councils should be to designate space as either private access (eg teaching areas) or public access (eg community and other uses of the school). Only in this way can realistic access controls be implemented. However, any security controls will be weakened by inconsiderate user behaviour. Custom and practice can lead to secure doors being left open to facilitate access. All building users (teachers, helpers, janitors, pupils, parents and visitors) need to be made aware of the implications of their actions.

Some schools may be able to adopt relatively low-cost measures to control access to their buildings during the school day. These measures include:

- reducing the number of entrances used
- clearly displaying external signs directing visitors to the main door/school reception
- installing door entry or attention buzzers, but not allowing pupils to answer bell calls
- establishing a visitors' book and pass badges, and personally escorting visitors to their intended destination.

Restricting unauthorised access to the school and its grounds raises many complex issues. The practical issues depend on the time of day; whether during the course of the school day, when the school is closed except for community use, or when the school is closed at the end of each day.

During the school day, the issues include:

- the potential conflict in minimising health and safety risks (eg safe exit from the building) and property risks (eg preventing unauthorised access to the building)
- the ongoing business of the school, the receiving of helpers, parents, visitors, contractors and delivery vehicles
- the frequent changeovers of pupils between classes, at interval breaks, and for some split-site schools, the transfer of pupils between school campuses
- the existence of public 'right of way' routes across the school grounds
- the control over pupil movements outwith the main school building, for example, to temporary accommodation and to outside toilets
- the level of pupil supervision in the playground.

Outwith the school day, other issues arise concerning:

- community use of the school
- council policies on permitting access to school grounds when schools are closed.

In allowing children and youths access to school grounds when schools are closed, councils need to recognise the increased risk of vandalism, and potentially fire, which often results.

Install physical measures to protect schools from crime

Despite the action taken by councils, much more needs to be done to protect schools against vandalism. For example, in the areas of the former councils of Fife, Lothian, Strathclyde and Tayside there are 107 schools (46 primary and 61 secondary schools) where, in most years, the recurring cost of vandalism exceeds £10,000 per school.

Councils cannot allow losses of this magnitude to continue unchecked. The vast majority of vandalism and fire-raising occurs when schools are closed. An effective response is required to protect schools during these hours when they are vulnerable.

“In 1995/96, over 200 windows were broken. CCTV was installed in March of this year and has made a dramatic impact on the incidence of breakages.”

*Primary school,
Aberdeenshire Council.*

Physical measures *do* help to reduce crime, especially outwith school hours, but only if they form part of an effective package of measures. Too often in the past, councils have adopted a reactive approach in response to specific instances of vandalism in schools. This strategy has often resulted in the experience of property crime (eg broken windows) being displaced to other parts of the school. Councils need to review all the main property risks facing a school and introduce a package of well-proven measures. In this way, the potential for displacement within the school will be minimised.

Council action to reduce vandalism should involve the following key steps:

- develop short-term objectives (prevent the situation from becoming worse) and longer-term objectives (say, reduce vandalism costs by 20% a year)
- identify the properties with the highest levels of vandalism
- encourage the worst-affected schools to assess their own position and decide what they need most
- prepare proposals on the specific measures to be adopted. This should be done by the head teacher, janitor, school board and local community interest groups, in conjunction with professional advice from, for example, the council's education service's resources manager, risk manager, property officer, and the police and fire services
- identify cost-effective measures to reduce the level of vandalism
- select appropriate security measures, having due regard to their impact on the school environment. The forms of preventative measures taken (both physical and educational) need to be carefully chosen to avoid any adverse psychological effect on pupils and staff
- establish a dedicated risk-management budget to fund the programme of priority needs
- carry out the most cost-effective solutions first, with the aim of implementing measures with a payback period of less than three years in the short term
- monitor and evaluate the results
- report outcomes to senior managers and councillors.

Implementing the recommendations in this report will take commitment from councillors, senior management and head teachers, with support from the police and fire services and other bodies. Councils will also have to spend in the short term to save in the medium term. The money will be difficult to find for some councils, but if the issues identified in this report are ignored, then the cost of damage from crime and vandalism is likely to continue to rise, and the security of schools may not be adequately improved. This may have the further effect of lowering the morale of pupils and staff, and may impact adversely on the quality of the learning environment.

This report shows that effective action can be taken. The Commission looks to all councils to follow the example of those that have tackled the issues by taking a corporate approach to risk management in their property, particularly in relation to school buildings.

What needs to be done

Summary of the key recommendations to councils

Adopt an organisational commitment to risk management, including:

- Establish a policy on risk management approved by councillors, setting out short- and long-term objectives.
- Develop a core risk group of officers with associated sub-groups, tasked to tackle specific issues, for example, vandalism and security in schools. The police and fire services should also be represented.

Improve risk-management education, training and awareness, including:

- Develop training courses for councillors and key managers who have responsibility for leading the council's commitment to managing property risks.
- Give head teachers, teachers and support staff risk-management training on appointment, and at regular intervals as part of in-service training.
- Establish training programmes for janitors on the use of new technology, recording processes and awareness of crime-related issues.
- Consider the extension of fire- and crime-prevention advice to secondary schools as part of pupils' 5-14 development programme.

Identify specific risk areas, including:

- Conduct a programme of risk assessment in all schools.
- Identify the schools most at risk.

Develop effective information systems, including:

- Develop centralised computer databases to collate information on the incidence, frequency and cost of losses from property crime and other risks.
- Prepare a risk profile for every school.
- Communicate vandalism and crime information to those who can take effective action, including partners such as the police and fire services.
- Keep councillors informed of the council's progress in reducing property-related risks in schools.

Design crime out of schools, including:

- Make risk assessment an integral element of school building planning and design, whether for new buildings or major refurbishment.
- Embrace the crime-prevention standards set out in the police service's 'Secured by Design' initiative.
- Include within the council's building design and planning processes a requirement to consult early with the police and fire services.

Minimise the incidence of false/faulty intruder alarm calls, including:

- Monitor and review the incidence and causes of false/faulty alarms.
- Take action to reduce the number of false/faulty alarm calls.

Provide corporate support for local solutions, including:

- Convince each school and its community to develop ownership of the problem.
- Encourage head teachers to understand their risk-management responsibilities.
- Involve the head teacher and janitor before taking important council decisions designed to improve the security of their school.
- Address the issues through the agenda of the school board, the parent-teacher association, and in the school's development plan.

Improve controls over access to schools, including:

- Adopt school security measures as part of the anti-crime package.
- Formulate a safety strategy and action plan for each school.

Take steps to counter vandalism in schools, including:

- Tackle the worst-affected schools as a matter of priority.
- Install physical measures to protect vulnerable schools.
- Carefully plan, consult on and implement a package of well-proven measures.
- Evaluate the effectiveness of measures taken in specific schools.

Resource the risk-management programme, including:

- Adopt a 'spend to save' philosophy to tackle school vandalism. Establish a dedicated budget to fund the programme.
- Aim for a programme of measures with a three-year payback targeted on schools worst affected by vandalism.
- Take up Government sources of financial assistance including specific grant and the CCTV Challenge Competition.
- Look to the council's own resources and to other potential sources of finance.
- Carry out the most cost-effective solutions first.

Appendix

Study fieldwork

The Commission's study fieldwork involved five core elements.

1 Interview of council managers

Eleven unitary councils, reflecting a range of city, urban and rural environments, participated in this element of the study. Structured interviews were held with council managers with significant experience and responsibility for strategic risk management, school property maintenance, health and safety, and implementing school security and crime-prevention measures.

The participating councils were Aberdeen City, Aberdeenshire, Dumfries and Galloway, City of Dundee, City of Edinburgh, Fife, City of Glasgow, Highland, Perth and Kinross, South Lanarkshire, and West Lothian. These new councils also provided information on the former regional council in their area.

Fieldwork included an examination of: council strategies for managing property-related risks; the processes for the selection, implementation and monitoring of preventative measures taken; the methods of financing the risk-management programme; the risk-management information systems in use; and councils' arrangements for raising awareness of risk-management issues through education and training programmes.

In addition, the study team assembled national data on the school property risk experience of the local education authorities for the financial year 1994/95 – the latest year for which full information was available.

2 Survey of head teachers

The responsibility of the head teacher in managing individual schools in a period of devolution is recognised. Consequently, the Commission wished to gather head teachers' views on the management of property-related risk in their schools, as an integral part of this study.

Over 260 head teachers, across 11 education authorities, were invited to complete a survey questionnaire for their schools. Issues covered included: identification of main property-related risks; local arrangements for managing and controlling building risks; initiatives taken to reduce risk; and the information collected to manage risk. The survey was conducted in late May 1996. A total of 214 head teachers provided a return – an excellent 82% response rate. Table A1 analyses these responses.

Table A1: Accounts Commission survey of head teachers

	Primary	Secondary
Number of questionnaires issued	174	88
Number of responses	143	71
Response rate	82%	81%

The significance of the level of response should not be underestimated. It provides a valuable database covering 6% and 18% of the total number of primary and secondary schools, respectively, in Scotland.

- 3 Enquiries of police, fire service and other agencies involved in controlling and reducing school property risks

The very nature of this study has involved liaison with a wide range of partners. The Scottish Office Crime Prevention Unit provided a valuable service in coordinating those partnerships within the police service, in particular, the specialisms of crime prevention and architectural liaison. In addition, they provided much support and advice.

During the course of the work, we consulted extensively with the fire service. In addition, meetings were held with representatives of the Association of Local Authority Risk Managers in Scotland (ALARMS), the Health and Safety Executive, the Scottish Association of Chief Building Control Officers, Her Majesty's Inspectorate of Schools and the Scottish Office Education and Industry Department.

- 4 Fire and security risk audits in selected schools

This element of the study was undertaken to gather information on the nature of the specific risks currently facing individual schools. The Commission contracted Zurich Municipal to conduct full fire and security surveys in six schools having different characteristics (that is, type of school, building construction and design). The buildings consisted of one urban and one rural primary school, three urban secondary schools, and a large community education centre.

- 5 Risk-management case studies in selected schools

The Commission contracted the Department of Risk and Financial Services of Glasgow Caledonian University to undertake independent case studies in selected schools. Specifically, schools were visited and interviews carried out covering the risk-management culture within the school itself, and the perception of head teachers of the risk-management systems within their local education authority. In total, ten schools were chosen to reflect different local characteristics, for example, the type of school, extent of community use, catchment area, and its vandalism/crime experience.



18 George Street
Edinburgh EH2 2QU
Telephone 0131 477 1234
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