

ACT AUDITOR–GENERAL’S REPORT
MAINTENANCE OF ACT GOVERNMENT
SCHOOL INFRASTRUCTURE
REPORT NO. 11 / 2019

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The Speaker
ACT Legislative Assembly
Civic Square, London Circuit
CANBERRA ACT 2601

Dear Madam Speaker

I am pleased to forward to you a Performance Audit Report titled 'Maintenance of ACT Government School Infrastructure' for tabling in the Legislative Assembly pursuant to Subsection 17(5) of the *Auditor-General Act 1996*.

Yours sincerely



Mr Michael Harris
Auditor-General
19 December 2019

The ACT Audit Office acknowledges the Ngunnawal people as traditional custodians of the ACT and pays respect to the elders; past, present and future. The Office acknowledges and respects their continuing culture and the contribution they make to the life of this city and this region.

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SUMMARY

Conclusions

MANAGING SCHOOL INFRASTRUCTURE ASSETS

The Education Directorate has a sound framework for the management of school infrastructure assets, including repairs and maintenance activities, which is documented through its *Strategic Asset Management Planning Framework for ACT public schools* (May 2016) and *Strategic Asset Management Plan* (December 2016). While there is a sound framework in place its implementation is hampered by poor supporting systems and processes.

The Education Directorate has not identified or articulated asset management objectives for its school infrastructure assets, nor has it implemented operational asset management planning. Annual asset maintenance planning undertaken by the schools was inconsistent and where plans were produced, they varied in their purpose, quality and comprehensiveness.

An important factor in asset management is understanding the condition of assets. Building condition data, through a regular program of assessment can be used to inform budgets, plan maintenance and inform the lifecycle of an asset. Building condition assessments of school infrastructure that were to be undertaken by the Directorate every three years, were scaled back in 2014 and stopped in 2018. This has led to the Education Directorate not having a clear and consolidated understanding of school infrastructure asset conditions. (The condition of some assets that give rise to specific legislative and health and safety compliance risks, e.g. fire monitoring systems, fire protection systems and roofs, are assessed and addressed as necessary through the *Annual Works Program*, which is delivered by the ACT Property Group on behalf of the Education Directorate through a Service Level Agreement). SPM Assets software that was purchased by the Directorate in 2015 to support the collection of building condition data, and facilitate detailed management and lifecycle planning of school assets, has not been effectively used. Building condition data has only been populated for two of the 88 schools managed by the Education Directorate.

Guidance that is provided to schools from the Education Support Office could be improved. In some instances, specific maintenance tasks that are regularly recommended by school building condition assessments do not have responsibilities defined in guidance material. This increases the risk that regular maintenance tasks are overlooked and can lead to increased cost and service issues.

REPAIRING AND MAINTAINING SCHOOL INFRASTRUCTURE ASSETS

In 2018-19 the Education Directorate spent \$26.71 million on repairs and maintenance activities. These were undertaken through the *Annual Works Program* (a program of routine inspection and maintenance activities of specific school assets managed by the ACT Property Group through a

Service Level Agreement), the *Specific Works Program* (a program managed by the Education Support Office through which schools submit requests for funding for repairs and maintenance activities) and by schools themselves using their annual School Operational Allocation funding. The poor systems and processes identified in Chapter 2 of this report, including the lack of asset management objectives for school infrastructure assets, operational asset management planning and building condition data, increases the risk that any repairs and maintenance activity that is undertaken through the different programs is costly, reactive and uncoordinated.

The Education Directorate does not have a clear understanding whether the *Annual Works Program* delivered by the ACT Property Group is being delivered efficiently and effectively. While a program of works was delivered by the ACT Property Group in 2018-19, the program budget was exceeded due to an increase in reactive maintenance costs (i.e. repairs and maintenance activities that are identified and undertaken following planned inspections) and the ACT Property Group charged a 12 percent management fee on top of actual costs. While the Education Directorate expects to have benefits from this arrangement, through efficiencies from economies of scale and better school infrastructure management outcomes, without any documentation to justify the creation of the agreement, or baseline data against which to judge financial performance, the effectiveness and efficiency of the arrangement cannot be determined. Furthermore, the lack of information on the purpose, intention or scope of the *Specific Works Program*, as well as insufficient documentation to support funding decisions, impairs the program’s effectiveness and its contribution to school infrastructure management.

The majority of repairs and maintenance managed by schools is reactive maintenance, rather than the preferred and more cost-effective planned maintenance. Maintenance planning by schools is limited. When maintenance is planned, it is of a general nature rather than a specific task where a quotation could be provided by a contractor. As a result, school repair and maintenance requirements are not effectively managed, with the cost of most planned maintenance being unknown. Reactive maintenance by its nature is more expensive than planned maintenance, and this is reflected in the expenditure by schools on repairs and maintenance. Schools consistently reported expenditure on repairs and maintenance that was above funding through the School Operational Allocation.

Key findings

MANAGING SCHOOL INFRASTRUCTURE ASSETS

Paragraph

Module 7 of the *School Management Manual* provides practical guidance on administrative roles and responsibilities for school infrastructure asset management, including how responsibility for school infrastructure asset management is allocated between the Infrastructure and Capital Works Branch and the schools. Whilst Module 7 of the *School Management Manual* generally provides concise guidance with respect to responsibilities, the document does not always address tasks that regularly arise in building condition assessments. Module 7 of the *School Management Manual* could be more effective in documenting and clearly defining

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asset management responsibilities between schools and the Infrastructure and Capital Works Branch.

The *Australian Standard on Asset Management* (AS ISO 55000:2014) notes the importance of an asset management system in providing ‘a structured approach for the development, coordination and control of activities undertaken on assets by the organisation over different life cycle stages, and for aligning these activities with its organisational objectives’. In support of an asset management system for the Education Directorate, in May 2016 a *Strategic Asset Management Report* and an *Asset Management Planning Framework for ACT public schools* was prepared by consulting firm Deloitte. The Report, which included six recommendations for improvement, and the Framework provided a sound basis for an asset management system for the Directorate, including ‘the principles and guidelines necessary to make informed decisions regarding the management of Schools buildings’.

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The *Australian Standard on Asset Management* (AS ISO 55000:2014) discusses the importance of developing a strategic asset management plan to guide an organisation’s strategic asset planning, including ‘[documenting] the relationship between the organisational objectives and the asset management objectives, and [defining] the framework required to achieve the asset management objectives’. In support of this requirement the Education Directorate developed the *Strategic Asset Management Plan* (December 2016). The *Strategic Asset Management Plan* (December 2016) provides high-level, summary information on a range of considerations and activities for repairs and maintenance and capital upgrades of school infrastructure. This is useful in setting out the high-level context for the strategic asset management of school infrastructure.

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The *Australian Standard on Asset Management* (AS ISO 55000:2014) discusses the importance of ‘[establishing] asset management objectives at relevant functions and levels’. The Education Directorate has not identified or articulated asset management objectives which serve as ‘the essential link between the organisational objectives and the asset management plan(s) that describe how those objectives are going to be achieved’. Nevertheless, the *Strategic Asset Management Plan* (December 2016) identified that the Directorate was in the process of developing property quality standards, which the Directorate would use ‘to assess the performance of school building assets and asset components [and] identify if the assets are being appropriately used, maintained and are fit for purpose’. Once developed, the property quality standards could usefully serve as asset management objectives but, at present, they are of limited use because they have only been developed for some school infrastructure assets (school canteens, toilets and carparks) and they have not been incorporated within the asset management information system. They are not serving as a means to measure, report and review asset infrastructure performance.

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The *Australian Standard on Asset Management* (AS ISO 55000:2014) notes the importance of developing operational asset management plans which outline activities that will be implemented and resources required to implement a strategic asset management plan. The first recommendation from the *Strategic Asset Management Report* (May 2016) was for the Education Directorate to develop asset management plans ‘which can be aggregated by school, network and asset type to

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inform the long term strategic asset planning for the Directorate'. No operational asset management plans have been prepared or developed by the Directorate. The lack of operational or asset management plans means that high-level strategic asset management planning issues and considerations identified in the *Strategic Asset Management Plan* (December 2016) are not translated into specific, documented and actionable asset management activities.

The *Strategic Asset Management Planning Framework for ACT public schools* (May 2016) discusses the importance of developing asset management plans for school infrastructure assets and translating these into 'an annual maintenance plan which details the maintenance tasks to be performed each year'. Comprehensive asset maintenance plans have not been developed for ACT public school infrastructure assets, as required by the *Strategic Asset Management Planning Framework for ACT public schools* (May 2016). 2.69

The *Strategic Asset Management Plan* (December 2016) establishes a requirement for schools to prepare annual maintenance plans and Module 7 of the *School Management Manual* establishes a requirement for schools to prepare an annual maintenance program. In practice these have been regarded as the same thing. In support of this requirement the Infrastructure and Capital Works Branch has developed a sample maintenance plan template to assist ACT public schools and their development of annual maintenance plans. The sample maintenance plan template has a twelve-month calendar year timeframe and allows for the allocation of a dollar amount to a series of line items allocated to four overall categories. The template does not prompt schools to identify and report asset condition assessments and does not facilitate forecasting of major replacements. In the absence of operational asset management plans, the annual maintenance plans, with a twelve-month calendar year horizon, do not facilitate effective infrastructure asset management planning. For the six schools that were considered as part of the audit there was considerable variability in what was presented to the Audit Office as a maintenance plan; one school had not prepared a maintenance plan and one school advised that it was in the process of drafting a maintenance plan. Maintenance plans prepared by the other schools varied in their purpose, quality and comprehensiveness. 2.79

The *Strategic Asset Management Planning Framework for ACT public schools* (May 2016) and the *Strategic Asset Management Plan* (December 2016) require that building condition assessments be conducted for each ACT public school every three years. The Infrastructure and Capital Works Branch coordinated building condition assessments for schools up to 2014 through a rolling program. The rolling program of building condition assessments was scaled back in 2014 and stopped in 2018. In June 2019 the Infrastructure and Capital Works Branch commenced a procurement process to engage a contractor to undertake a rolling program of building condition assessments, but this procurement activity did not lead to the identification of an acceptable, value for money service provider. The lack of contemporaneous building condition assessment data through a rolling program of assessments across ACT public schools impairs the ability of the Education Directorate to effectively plan and manage its repairs and maintenance activities. 2.90

In late 2015, the Education Directorate purchased SPM Assets as an asset management information system. It was purchased for \$52,500 (GST ex) in 2015, with an initial annual subscription cost for core modules of \$18,600 (GST ex), and since then the Education Directorate has paid an ongoing subscription and support cost of \$8,865 (GST ex) every three months, i.e. \$35,460 (GST ex) each year. The Infrastructure and Capital Works Branch entered building condition assessment data for two schools as part of a pilot exercise in November 2018, but no other building condition assessment data is in the system for other schools. SPM Assets is not being effectively used to assist in the planning and management of school infrastructure assets.

2.99

REPAIRING AND MAINTAINING SCHOOL INFRASTRUCTURE ASSETS

Paragraph

The ACT Property Group provides 'maintenance management services' to the Education Directorate for school infrastructure-related repairs and maintenance for the *Annual Works Program* through a Service Level Agreement. The services provided by the ACT Property Group through the *Annual Works Program* comprise routine, compliance-based inspections and preventive maintenance related to legislative and health and safety compliance activities. The Service Level Agreement is described as an ongoing agreement with a '[twelve] month annual budget review'. It commenced on 2 July 2018, but was signed on 28 June 2019. The Service Level Agreement described services to be delivered to 30 June 2019, including a schedule of activities across 2018-19 and payments to be made each month for the services, and in July 2019 a schedule of activities for 2019-20 and associated payments for these services were agreed by the parties.

3.19

In 2018-19 the ACT Property Group charged the Directorate \$4.9 million for repairs and maintenance services provided through the Service Level Agreement. (This figure includes a twelve percent management fee charged by the ACT Property Group for the services. The figure does not include services provided by the ACT Property Group through other programs and activities). The cost of reactive maintenance services provided through the Service Level Agreement was \$2.25 million against a budget of \$1.33 million, an increase of \$0.91 million (69 percent). The twelve percent management fee was also charged in addition to this amount. Prior to entering into the Service Level Agreement with the ACT Property Group, no documentation was prepared by the Directorate justifying the arrangement including the expected benefits and the risks and costs of entering into such an arrangement. By managing these activities centrally through the ACT Property Group, the Directorate advised that it sought to achieve efficiencies from economies of scale and better school infrastructure management outcomes as well as a reduction in administrative effort on the part of the Infrastructure and Capital Works Branch. The lack of baseline data on the cost of these activities, and the effectiveness of their management prior to being delivered by the ACT Property Group, as well as the fact that the ACT Property Group has only been delivering these services for a comparatively short time (less than six months in some instances), means the efficiency and effectiveness of the arrangement cannot be determined.

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The School Infrastructure Management Team within the Infrastructure and Capital Works Branch manages the *Specific Works Program* for 'major repair works and

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planned maintenance programs that are not school responsibilities under the Schools Operational Allocation (SOA) guidelines'. There is no specific description of the *Specific Works Program*, its purpose, intention or scope, and no guidelines have been developed to assist the Infrastructure and Capital Works Branch decision-making for the program. In 2016-17 a total of \$3.9 million was spent under the program, but this has since declined to \$2.6 million in 2018-19. ACT public schools typically request funding for activities well in excess of the program budget, with \$14.3 million sought in 2016-17 and \$16.2 million sought in 2017-18 (poor documentation and record-keeping means there is no consolidated list of funding requests from ACT public schools for 2018-19). In the absence of guidelines or funding criteria the Infrastructure and Capital Works Branch exercises considerable discretion in its decision-making under the program, but for the three years to 2018-19 there has been insufficient documentation of funding decisions. Poor documentation and record-keeping associated with the program, including a lack of information on the purpose, intention or scope, as well as insufficient documentation of funding criteria means that the effectiveness of the *Specific Works Program* in contributing to the management of school infrastructure assets cannot be determined.

A review of ACT public schools' allocation of repairs and maintenance funding through the School Operational Allocation and expenditure on repairs and maintenance as recorded in the Directorate's MAZE management information system shows: for 2017 schools were allocated a total of \$5.2 million in funding, but reported spending a total of \$6.9 million; and for 2018 schools were allocated a total of \$5.4 million in funding, but reported spending a total of \$8.2 million. This suggests that ACT public schools are using other components of the School Operational Allocation to pay for repairs and maintenance activities or are funding repairs and maintenance activities through other sources of revenue. 3.67

A review of the six schools selected as part of the audit and their repairs and maintenance expenditure shows: 3.70

- for 2017 and 2018 five of the six schools recorded repairs and maintenance expenditure in the MAZE management information system in excess of the notional allocation of funding through the School Operational Allocation. The schools reported expenditure of between 32 to 161 percent more than was allocated (\$32 865 and \$109 821 respectively); and
- for 2017 and 2018 five of the six schools reported repairs and maintenance expenditure to the school community through the school Board in excess of the amount reported in the MAZE management information system. It is possible that school board reports include expenditure for other minor works, which are not categorised as repairs and maintenance expenditure in the MAZE management information system.

Schools are undertaking repairs and maintenance activities, though evidence shows that the majority of these works are reactive maintenance, rather than planned maintenance. Comprehensive asset management processes, including building condition assessments and annual maintenance planning would assist with planned 3.77

maintenance activities that are expected to reduce the amount of more expensive reactive maintenance.

Recommendations

RECOMMENDATION 1 POLICY AND PROCEDURAL GUIDANCE

The Education Directorate should revise Module 7 of the *School Management Manual* to clearly identify responsibilities for repairs and maintenance activities between the Infrastructure and Capital Works Branch and schools, and in doing so ensure that there is consistency and clarity in language in both Module 7 and the building condition assessments reports.

RECOMMENDATION 2 PROPERTY QUALITY STANDARDS

The Education Directorate should complete the development of property quality standards, and incorporate them into the asset management system. Property quality standards should then be used to assess the performance of assets and identify if the assets are being appropriately used, maintained and are fit for purpose.

RECOMMENDATION 3 OPERATIONAL ASSET MANAGEMENT PLANS

The Education Directorate should develop operational asset management plans for its school infrastructure assets. The plans should contain information to inform long term strategic asset planning for the Education Directorate and should address matters such as responsibility for the asset, arrangements for monitoring asset performance, operational training and estimated operating costs.

RECOMMENDATION 4 ANNUAL MAINTENANCE PLANS

The Education Directorate should prepare and execute comprehensive annual maintenance plans for school infrastructure assets, which outline the specific tasks which are to be undertaken during the year as well as the estimated resources and cost of maintenance activities. The annual maintenance plans should align with, and support, operational asset management plans to be developed as part of Recommendation 3.

RECOMMENDATION 5 BUILDING CONDITION ASSESSMENTS

The Education Directorate should:

- a) recommence its rolling program of building condition assessments; and
- b) populate its asset management information system, SPM Assets, with the results of the building condition assessments in order to facilitate and inform asset maintenance planning.

RECOMMENDATION 6 SERVICE LEVEL AGREEMENT

The Education Directorate should develop baseline data for the cost of activities undertaken under the Service Level Agreement. Expectations should be developed for the benefits that the Service Level Agreement aims to provide and the expectations should be periodically reviewed to inform the performance of the Service Level Agreement.

RECOMMENDATION 7 SPECIFIC WORKS PROGRAM

The Education Directorate should state the purpose and scope of the Specific Works Program and prepare guidelines and funding criteria. Record keeping should be improved with all funding decisions comprehensively recorded.

RECOMMENDATION 8 SCHOOL EXPENDITURE ON REPAIRS AND MAINTENANCE

The Education Directorate should review:

- a) the methods used to record repair and maintenance activities, and the expenditure on repairs and maintenance, with a view to achieving consistent and consolidated reporting; and
- b) the operation of the School Operational Allocation, to determine why schools exceeded their maintenance component allocations in 2017 and 2018.

Agency response

In accordance with subsection 18(2) of the *Auditor-General Act 1996*, the Education Directorate and Chief Minister, Treasury and Economic Development Directorate were provided with:

- a draft proposed report for comment. All comments are considered and required changes reflected in the final proposed report; and
- a final proposed report for further comment.

Education Directorate response

The Education Directorate welcomes the Auditor-General's performance audit on the maintenance of schools and looks forward to progressing key issues identified during the audit. The audit findings support the Directorate's mandate to enable schools where students love to learn, and our work programs reflect this key objective.

We appreciate that the audit recognised that the Directorate has a sound framework for the management of school infrastructure assets, including repair and maintenance activities. We also remain committed to achieving value for money in public expenditure, meeting our legislative and health and safety compliance obligations, and continually improving our school building maintenance systems and processes.

1 INTRODUCTION

School infrastructure

ACT public schools

- 1.1 The ACT Education Directorate (the Directorate) provides education services to children and young people through 88 public schools in the ACT.¹ As at February 2019, 49 152 students were enrolled in ACT public schools (62 percent of all students in ACT schools).
- 1.2 The Directorate comprises the Education Support Office and public schools, which are organised into four geographic networks: Belconnen, North/Gungahlin, South/Weston and Tuggeranong. Table 1-1 shows the type and number of schools in the ACT as at January 2019.

Table 1-1 Type and number of public schools in the ACT

School type	Student cohort	Number of schools
Early childhood school	Preschool to Year 2 ²	6
Primary school	Preschool/Kindergarten to Year 6	51
Combined school	Preschool to Year 10 or Years 7–12	9
High school	Years 7–10	10
College	Years 11–12	8
Specialist school	Students with significant intellectual and other associated impairments	4
Total		88

Source: ACT Audit Office, based on Education Directorate information.

School infrastructure assets

- 1.3 Assets are items, things or entities that provide actual or potential value to an organisation. Physical assets are usually buildings, equipment and inventory.³ The Directorate's school infrastructure assets comprise:
- **school buildings** including classrooms, offices, gymnasiums, workshops and theatres;
 - **building infrastructure, plant and equipment** including heating, ventilation and cooling (HVAC) systems, security systems, fire detection and prevention systems,

¹ The ACT school system comprises public schools, Catholic schools and independent private schools.

² Early childhood schools also provide programs for children from birth to 4 years, but these programs are not delivered by the Directorate.

³ *AS ISO 55000:2014 Asset Management—Overview, principles and terminology*, s 3.2.1, p. 13.

electrical switchboards, lighting, plumbing, solar panels and infrastructure for hydrotherapy pools;

- **school grounds** including trees, playing fields and garden beds; and
- **grounds infrastructure** including car parks, bike sheds, paths, playgrounds, physical activity equipment, shade structures and security fences.

1.4 Other assets of the Directorate include ICT-related infrastructure.⁴

1.5 The effective management of school infrastructure assets is a key means of ensuring that schools and school infrastructure is fit for purpose, including by being safe and accessible to students and young people.

1.1 The Directorate's public school infrastructure is a major Territory asset, with a total value of \$1.91 billion in 2018 (land and buildings).⁵

Future requirements of school infrastructure assets

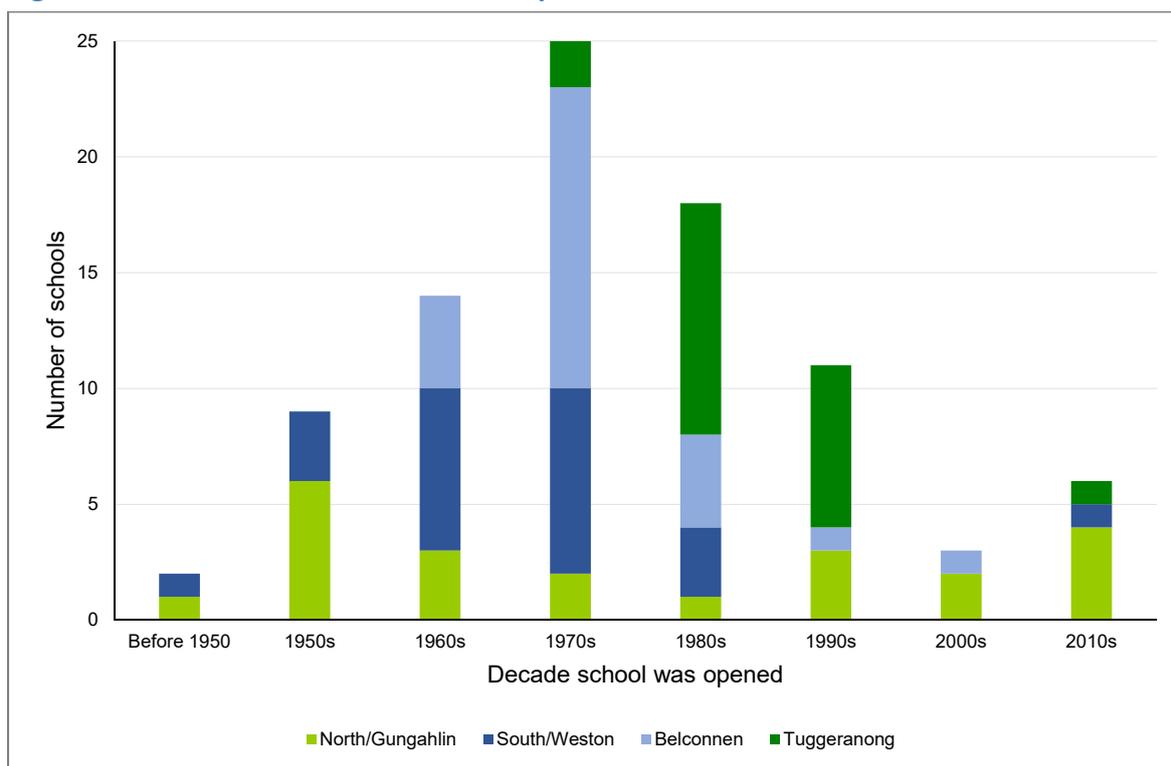
Age of school infrastructure assets

1.2 The age of the Directorate's school infrastructure assets ranges from less than one year to 96 years.⁶ School sites have been improved and extended over time, and as such buildings at some schools differ in age. Figure 1-1 shows the decade in which ACT public schools were opened across the ACT, which gives some indication as to the potential age of school infrastructure assets.

⁴ The audit does not consider the management of ICT-related infrastructure, but instead focuses on the management of physical school infrastructure.

⁵ https://www.education.act.gov.au/_data/assets/pdf_file/0020/1259210/Education-Annual-Report-2017-18.pdf, page 226

⁶ Telopea Park School in the South/Weston network opened in 1923 and Ainslie School in the North/Gungahlin network opened in 1927. Margaret Hendry School in the North/Gungahlin network opened in January 2019.

Figure 1-1 Establishment date of ACT public schools

Source: ACT Audit Office, based on Education Directorate information.

- 1.3 Almost half of ACT public schools (48 percent) were opened during the 1970s and 1980s. The majority of schools (90 percent) in the ACT are more than 20 years old, with 79 schools being opened prior to the year 2000.

Increases in student numbers

- 1.4 The number of children aged birth to 14 years in the ACT is projected to increase from 78 142 in 2017 to 87 312 in 2022 (a 12 percent increase),⁷ and increase to 123 035 in 2058; an average increase of 1.4 percent per year for this period.⁸
- 1.5 Ageing school infrastructure and increasing student numbers demonstrate the ongoing importance of effectively managing school infrastructure, including through effective repairs and maintenance activities, in order to ensure schools and school infrastructure remains fit for purpose.

⁷ https://apps.treasury.act.gov.au/_data/assets/pdf_file/0005/1305581/ACT-Population-Projections-Paper-FINAL.pdf, page 38

⁸ https://apps.treasury.act.gov.au/_data/assets/pdf_file/0005/1305581/ACT-Population-Projections-Paper-FINAL.pdf, pages 41 & 42

Asset management

- 1.6 Effective asset management focuses on the value assets have in delivering an organisation's objective to its stakeholders. For school infrastructure assets this relates to how well they function in supporting the Directorate to deliver contemporary education services to children and young people in the ACT.
- 1.7 Asset management is a coordinated set of activities undertaken by an organisation to realise value from its assets. These activities broadly involve:
- planning for the required assets;
 - acquiring assets;
 - operating, maintaining, repairing and upgrading assets; and
 - disposing of assets.
- 1.8 Through a governance framework, effective asset management translates an organisation's objectives into technical and financial decisions about its assets, and asset management plans and activities. Effective asset management also provides assurance to an organisation that its assets are fulfilling their required purpose.

Importance of asset management

- 1.9 The foreword to the Australian National Audit Office *Better Practice Guide on the Strategic and Operational Management of Assets by Public Sector Entities* outlines the importance of strategic and operational asset management for public sector entities. This guidance has remained unchanged since September 2010:

Asset management is an essential component of good governance in both the public and private sectors, and should be aligned to, and integrated with, an entity's strategic, corporate and financial planning.

For entities which manage large asset holdings, a well-structured, practical asset management framework can assist in providing clarity for stakeholders as to the linkages between asset levels and the outcomes expected of the entity, and thus aid decisions on asset management.

...

The main message is to ensure entities have a disciplined approach to match their investment in assets to program requirements, and to plan for asset replacement in a strategic way which accords with the Government's capital budgeting framework where applicable.

- 1.10 The November 2014 *Australian Standard on Asset Management (AS ISO 55000:2014) Asset management – Overview, principles and terminology* also identifies the benefits to an organisation of asset management:

Asset management enables an organisation to realise value from assets in the achievement of its organisational objectives. What constitutes value will depend on these objectives, the nature and purpose of the organisation and the needs and expectations of its stakeholders. Asset management supports the realisation of value while balancing financial, environmental and social costs, risk, quality of service and performance related to assets.

1.11 The *Australian Standard on Asset Management (AS ISO 55000:2014) Asset management – Overview, principles and terminology* describes the benefits of asset management as including:

- improved financial performance
- informed asset investment decisions
- managed risk
- improved services and outputs
- demonstrated social responsibility
- demonstrated compliance
- enhanced reputation
- improved organisational sustainability
- improved efficiency and effectiveness

Roles and responsibilities for school asset management

1.12 The management of school buildings and infrastructure is shared between the Infrastructure and Capital Works Branch in the Education Directorate and schools. The Branch, school principals and school boards have varying responsibilities for repairs and maintenance activities. The ACT Property Group within the Chief Minister, Treasury and Economic Development Directorate, also has a role in undertaking repairs and maintenance work on behalf of the Education Directorate through a Service Level Agreement.

Asset management activities

1.13 In relation to the operation, maintenance, repair and upgrade of assets, key concepts for the purpose of this audit are:

- repairs and maintenance; and
- capital upgrades.

Repairs and maintenance

1.14 Repairing and maintaining an asset involves restoring, remediating, replacing or renewing the asset to either its original condition or a condition where it continues to fulfil its required purpose. For the Directorate, its activities to repair and maintain school infrastructure assets should ensure that the assets continue to meet the functional needs of delivering contemporary education services, provide a safe and comfortable environment for students and staff, and reduce the incidence of avoidable costly repairs and reconstruction.

1.15 Repairs and maintenance may be reactive or preventative. Reactive maintenance is normally unplanned and is required when a failure requires immediate attention to maintain the required level of service and prevent increased health, safety or security risks. Preventative maintenance activities are undertaken on a regular basis with a view to reduce the likelihood of a failure and are often undertaken to ensure continued compliance with statutory obligations. Effective maintenance plans should seek to provide a level of preventative maintenance which reduces reactive maintenance.

Capital Upgrades

1.16 Capital works are those that involve the creation of a new structure and/or facility, or a modification to the original design configuration to extend the facility or produce a functional change. Capital upgrades are a key component of capital works, which involve improvements to existing infrastructure, the installation of new equipment or the reconfiguration of school buildings. Capital upgrades may be identified through effective asset management activities.

1.17 The Directorate's asset management activities necessarily lead to decisions and activities associated with both repairs and maintenance and capital upgrades of assets. Accordingly, the Directorate's asset management activities as a whole were considered as part of the audit, with a particular focus on repairs and maintenance activities.

Expenditure on school asset management

1.18 Table 1-2 shows the Education Directorate's spending on school infrastructure management, including:

- repairs and maintenance; and
- capital upgrades.

Table 1-2 Repairs and maintenance and capital upgrade expenditure (2016-17 to 2018-19)

	2016-17 (\$'m)	2017-18 (\$'m)	2018-19 (\$'m)
Repairs and Maintenance	26.19	24.62	26.71
Education Support Office	18.18	17.75	18.50
Schools	8.01	6.86	8.21
Capital Upgrades	14.57	19.49	27.10

Source: ACT Audit Office, based on financial data from the Education Directorate

1.19 In the three years between 2016-17 and 2018-19:

- the Directorate has spent a total of \$77.52 million on repairing and maintaining school infrastructure as well as a total of \$61.16 million on capital upgrades to school infrastructure;

- the Education Support Office has consistently been responsible for most of the expenditure on repairs and maintenance (including activities undertaken by the ACT Property Group on behalf of the Education Support Office). In 2018-19 it spent \$18.50 million compared to schools' expenditure of \$8.21 million;
 - there has been a significant increase in capital upgrade expenditure, with expenditure increasing by 33.8 percent (\$4.9 million) in 2017-18 and 39.0 percent (\$7.6 million) in 2018-19.
- 1.20 Of the \$26.71 million spent on repairs and maintenance by the Education Directorate, either through the Infrastructure and Capital Works Branch of the Education Support Office or the schools, \$12.29 million related to services arranged by the ACT Property Group. This figure also includes a 12 percent service fee charged by the ACT Property Group for these services, which amounted to \$1.32 million.

Audit objective and scope

Audit objective

- 1.21 The objective of the audit is to provide an independent opinion to the Legislative Assembly on the efficiency and effectiveness of the repairs and maintenance of ACT public school infrastructure.

Audit scope

- 1.22 The audit considered the activities of the Education Directorate to manage the repairs and maintenance of school infrastructure. The primary focus was on the Education Support Office and schools':
- asset management activities and initiatives; and
 - activities to identify and address school repairs and maintenance requirements.
- 1.23 The audit's focus was on schools, but in doing so gave consideration to:
- the Education Support Office, including its activities to:
 - provide support and guidance to schools for asset management and repairs and maintenance; and
 - provide support to schools for the procurement of repairs and maintenance (including cross-school procurement and contracting arrangements for specific repairs and maintenance activities)
 - the ACT Property Group, including its activities to:
 - provide support to schools and the Education Support Office for the procurement of repairs and maintenance (including cross-school procurement and contracting arrangements for specific repair and maintenance activities)

- 1.24 The audit primarily focused on repairs and maintenance activities and initiatives, but in doing so recognised that schools' asset management activities and initiatives may not draw a distinction between repairs and maintenance and capital upgrades.

Out of scope

- 1.25 The audit did not consider the repairs and maintenance of:
- non-school infrastructure, e.g. 220 Northbourne Avenue and the Hedley Beare Centre for Teaching and Learning; and
 - non-public school infrastructure.
- 1.26 Planned capital works activities were also not considered as part of the audit.

Audit criteria, approach and method

Audit criteria

- 1.27 To form a conclusion against the objective, the following criteria were used.

Criterion One: Does the Education Directorate effectively manage school infrastructure assets?

- does the Education Directorate (i.e. the Education Support Office and schools) review the performance of school infrastructure regularly and in accordance with documented plans?
- does the Education Directorate provide objectives and plan for:
 - the reliable performance of school infrastructure?
 - the expected operational life of school infrastructure?
- do schools receive effective support from the Education Support Office?
 - does the Education Support Office provide adequate policy and procedural guidance for schools to manage school infrastructure?
 - does the Education Support Office have effective processes to assist schools with school infrastructure management?

Criterion Two: Does the Education Directorate effectively manage school repair and maintenance requirements?

- does the Education Directorate (i.e. the Education Support Office and schools) have appropriate school infrastructure data to identify, prioritise and understand school maintenance needs? Including:
 - building condition;
 - building performance;
 - repair and maintenance work undertaken on buildings; and
 - compliance with legislative and/or statutory requirements?

- does the Education Directorate (i.e. the Education Support Office and schools) allocate resources and adequately budget for school repair and maintenance works?
- does the Education Directorate (i.e. the Education Support Office and schools) use appropriate and established decision-making criteria when making repair and maintenance procurement decisions?
- do schools receive effective support from the Education Support Office and ACT Property Group?
 - do the Education Support Office and ACT Property Group provide adequate policy and procedural guidance for schools to manage repair and maintenance procurement activities?
 - do the Education Support Office and ACT Property Group have effective processes to assist schools with repair and maintenance procurement activities, e.g. contractor panel arrangements?

Audit approach and method

1.28 The audit approach and method consisted of:

- interviews and discussions with key staff at the Education Directorate and the ACT Property Group in the Chief Minister, Treasury and Economic Development Directorate;
- identifying and reviewing relevant information and documentation relating to school asset management, including policies and procedures and relevant reports;
- identifying and documenting internal controls and procedures used to give effect to the policies and to ensure compliance, and evaluating the effectiveness of these controls;
- examining records relating to the maintenance of school buildings and the condition of school buildings; and
- reviewing relevant literature and work undertaken on school asset management in other jurisdictions to identify better practices.

1.29 The audit approach also included fieldwork in a selection of six schools to identify how the schools managed the maintenance and repair of their school infrastructure. The selection of schools covered a cross-section of schools with the following characteristics:

- age—new and old;
- type—primary, high, combined, specialist and college;
- location—across school networks;
- size—large and small; and
- occupancy level—high and low.

1.30 Table 1-3 shows the schools that were selected and their characteristics.

Table 1-3 Schools selected for audit fieldwork

School	Type	School network	Age (years)	Capacity	Occupancy
Charles Weston	Primary	South/Weston	3	900	44%
Calwell High	High	Tuggeranong	30	738	52%
Kingsford Smith School	Combined	Belconnen	10	1 265	69%
Telopea Park	Combined	South/Weston	96	1 505	95%
Malkara School	Specialist	South/Weston	49	N/A	79 students
Gungahlin College	College	North/Gungahlin	8	1 288	89%

Source: ACT Audit Office, based on Education Directorate information

- 1.31 The audit was performed in accordance with *ASAE 3500 – Performance Engagements*. The audit adopted the policy and practice statements outlined in the Audit Office’s *Performance Audit Methods and Practices (PAMPr)* which is designed to comply with the requirements of the *Auditor-General Act 1996* and *ASAE 3500 – Performance Engagements*.
- 1.32 In the conduct of this performance audit the ACT Audit Office complied with the independence and other relevant ethical requirements related to assurance engagements.

2 MANAGING SCHOOL INFRASTRUCTURE ASSETS

- 2.1 Managing school infrastructure assets involves planning required school infrastructure assets, acquiring them, using, maintaining, repairing and upgrading them, and disposing of them, when they no longer support the Directorate to deliver contemporary education services to children and young people in the ACT.

Summary

Conclusion

The Education Directorate has a sound framework for the management of school infrastructure assets, including repairs and maintenance activities, which is documented through its *Strategic Asset Management Planning Framework for ACT public schools* (May 2016) and *Strategic Asset Management Plan* (December 2016). While there is a sound framework in place its implementation is hampered by poor supporting systems and processes.

The Education Directorate has not identified or articulated asset management objectives for its school infrastructure assets, nor has it implemented operational asset management planning. Annual asset maintenance planning undertaken by the schools was inconsistent and where plans were produced, they varied in their purpose, quality and comprehensiveness.

An important factor in asset management is understanding the condition of assets. Building condition data, through a regular program of assessment can be used to inform budgets, plan maintenance and inform the lifecycle of an asset. Building condition assessments of school infrastructure that were to be undertaken by the Directorate every three years, were scaled back in 2014 and stopped in 2018. This has led to the Education Directorate not having a clear and consolidated understanding of school infrastructure asset conditions. (The condition of some assets that give rise to specific legislative and health and safety compliance risks, e.g. fire monitoring systems, fire protection systems and roofs, are assessed and addressed as necessary through the *Annual Works Program*, which is delivered by the ACT Property Group on behalf of the Education Directorate through a Service Level Agreement). SPM Assets software that was purchased by the Directorate in 2015 to support the collection of building condition data, and facilitate detailed management and lifecycle planning of school assets, has not been effectively used. Building condition data has only been populated for two of the 88 schools managed by the Education Directorate.

Guidance that is provided to schools from the Education Support Office could be improved. In some instances, specific maintenance tasks that are regularly recommended by school building condition assessments do not have responsibilities defined in guidance material. This increases the risk that regular maintenance tasks are overlooked and can lead to increased cost and service issues.

Key findings

	Paragraph
<p>Module 7 of the <i>School Management Manual</i> provides practical guidance on administrative roles and responsibilities for school infrastructure asset management, including how responsibility for school infrastructure asset management is allocated between the Infrastructure and Capital Works Branch and the schools. Whilst Module 7 of the <i>School Management Manual</i> generally provides concise guidance with respect to responsibilities, the document does not always address tasks that regularly arise in building condition assessments. Module 7 of the <i>School Management Manual</i> could be more effective in documenting and clearly defining asset management responsibilities between schools and the Infrastructure and Capital Works Branch.</p>	2.28
<p>The <i>Australian Standard on Asset Management</i> (AS ISO 55000:2014) notes the importance of an asset management system in providing ‘a structured approach for the development, coordination and control of activities undertaken on assets by the organisation over different life cycle stages, and for aligning these activities with its organisational objectives’. In support of an asset management system for the Education Directorate, in May 2016 a <i>Strategic Asset Management Report</i> and an <i>Asset Management Planning Framework for ACT public schools</i> was prepared by consulting firm Deloitte. The Report, which included six recommendations for improvement, and the Framework provided a sound basis for an asset management system for the Directorate, including ‘the principles and guidelines necessary to make informed decisions regarding the management of Schools buildings’.</p>	2.41
<p>The <i>Australian Standard on Asset Management</i> (AS ISO 55000:2014) discusses the importance of developing a strategic asset management plan to guide an organisation’s strategic asset planning, including ‘[documenting] the relationship between the organisational objectives and the asset management objectives, and [defining] the framework required to achieve the asset management objectives’. In support of this requirement the Education Directorate developed the <i>Strategic Asset Management Plan</i> (December 2016). The <i>Strategic Asset Management Plan</i> (December 2016) provides high-level, summary information on a range of considerations and activities for repairs and maintenance and capital upgrades of school infrastructure. This is useful in setting out the high-level context for the strategic asset management of school infrastructure.</p>	2.50
<p>The <i>Australian Standard on Asset Management</i> (AS ISO 55000:2014) discusses the importance of ‘[establishing] asset management objectives at relevant functions and levels’. The Education Directorate has not identified or articulated asset management objectives which serve as ‘the essential link between the organisational objectives and the asset management plan(s) that describe how those objectives are going to be achieved’. Nevertheless, the <i>Strategic Asset Management Plan</i> (December 2016) identified that the Directorate was in the process of developing property quality standards, which the Directorate would use ‘to assess the performance of school building assets and asset components [and] identify if the assets are being appropriately used, maintained and are fit for purpose’. Once developed, the property quality standards could usefully serve as asset management objectives but, at present, they are of limited use because they have only been</p>	2.59

developed for some school infrastructure assets (school canteens, toilets and carparks) and they have not been incorporated within the asset management information system. They are not serving as a means to measure, report and review asset infrastructure performance.

The *Australian Standard on Asset Management (AS ISO 55000:2014)* notes the importance of developing operational asset management plans which outline activities that will be implemented and resources required to implement a strategic asset management plan. The first recommendation from the *Strategic Asset Management Report (May 2016)* was for the Education Directorate to develop asset management plans ‘which can be aggregated by school, network and asset type to inform the long term strategic asset planning for the Directorate’. No operational asset management plans have been prepared or developed by the Directorate. The lack of operational or asset management plans means that high-level strategic asset management planning issues and considerations identified in the *Strategic Asset Management Plan (December 2016)* are not translated into specific, documented and actionable asset management activities. 2.65

The *Strategic Asset Management Planning Framework for ACT public schools (May 2016)* discusses the importance of developing asset management plans for school infrastructure assets and translating these into ‘an annual maintenance plan which details the maintenance tasks to be performed each year’. Comprehensive asset maintenance plans have not been developed for ACT public school infrastructure assets, as required by the *Strategic Asset Management Planning Framework for ACT public schools (May 2016)*. 2.69

The *Strategic Asset Management Plan (December 2016)* establishes a requirement for schools to prepare annual maintenance plans and Module 7 of the *School Management Manual* establishes a requirement for schools to prepare an annual maintenance program. In practice these have been regarded as the same thing. In support of this requirement the Infrastructure and Capital Works Branch has developed a sample maintenance plan template to assist ACT public schools and their development of annual maintenance plans. The sample maintenance plan template has a twelve-month calendar year timeframe and allows for the allocation of a dollar amount to a series of line items allocated to four overall categories. The template does not prompt schools to identify and report asset condition assessments and does not facilitate forecasting of major replacements. In the absence of operational asset management plans, the annual maintenance plans, with a twelve-month calendar year horizon, do not facilitate effective infrastructure asset management planning. For the six schools that were considered as part of the audit there was considerable variability in what was presented to the Audit Office as a maintenance plan; one school had not prepared a maintenance plan and one school advised that it was in the process of drafting a maintenance plan. Maintenance plans prepared by the other schools varied in their purpose, quality and comprehensiveness. 2.79

The *Strategic Asset Management Planning Framework for ACT public schools (May 2016)* and the *Strategic Asset Management Plan (December 2016)* require that building condition assessments be conducted for each ACT public school every three years. The Infrastructure and Capital Works Branch coordinated building condition 2.90

assessments for schools up to 2014 through a rolling program. The rolling program of building condition assessments was scaled back in 2014 and stopped in 2018. In June 2019 the Infrastructure and Capital Works Branch commenced a procurement process to engage a contractor to undertake a rolling program of building condition assessments, but this procurement activity did not lead to the identification of an acceptable, value for money service provider. The lack of contemporaneous building condition assessment data through a rolling program of assessments across ACT public schools impairs the ability of the Education Directorate to effectively plan and manage its repairs and maintenance activities.

In late 2015, the Education Directorate purchased SPM Assets as an asset management information system. It was purchased for \$52,500 (GST ex) in 2015, with an initial annual subscription cost for core modules of \$18,600 (GST ex), and since then the Education Directorate has paid an ongoing subscription and support cost of \$8,865 (GST ex) every three months, i.e. \$35,460 (GST ex) each year. The Infrastructure and Capital Works Branch entered building condition assessment data for two schools as part of a pilot exercise in November 2018, but no other building condition assessment data is in the system for other schools. SPM Assets is not being effectively used to assist in the planning and management of school infrastructure assets.

2.99

Roles and responsibilities

- 2.2 Roles and responsibilities for the management of school infrastructure assets are outlined in legislation and administrative policy.

Legislation

- 2.3 The legislative framework for managing school infrastructure assets is derived from the *Public Sector Management Act 1994*, *Financial Management Act 1994*, *Education Act 2004* and the *Work Health and Safety Act 2011*.

Public Sector Management Act 1994

- 2.4 Directors-general and other agency chief executives are primarily responsible, in accordance with subsection 19(1) of the *Public Sector Management Act 1994*, which states:

A director-general is—

- (a) responsible for leadership of an administrative unit and leadership in the service; and
- (b) answerable to the Minister responsible for the administrative unit and to the head of service.

Financial Management Act 1994

- 2.5 With respect to the use of Territory resources, subsection 31(1) of the *Financial Management Act 1996* states:

The responsible director-general of a directorate is accountable to the responsible Minister of the directorate for the efficient and effective financial management of the directorate.

- 2.6 Subsection 31(4) of the *Financial Management Act 1996* provides further guidance on the efficient and effective use of Territory resources, noting:

Without limiting subsections (1), (2) and (3), the responsible director general of a directorate is responsible, under the responsible Minister, for ensuring—

...

- (e) that adequate control is maintained over the assets of the directorate and assets in the control of the directorate; ...

Education Act 2004

- 2.7 Section 21 of the *Education Act 2004* provides a framework of roles and responsibilities for the management of ACT public schools. Subsection 21(1) provides that the Director-General is responsible to the Minister for the operation of ACT public schools. Subsection 21(4) of the *Education Act 2004* provides that:

The Principal of a government school is responsible for:

- a) educational leadership and management of the school; and
- b) educational outcomes for students at the school; and
- c) providing support to the School Board in the carrying out of its functions; and
- d) contributing to the development and implementation of educational policies and strategies.

- 2.8 In support of the autonomy and responsibility of each ACT public school, section 38 of the *Education Act 2004* provides for the establishment of a School Board for each school. Section 39 of the Act provides:

The functions of the school board of a government school are:

...

- (e) to establish budgetary policies for the school and approve the school budget; and
- (f) to establish policies for the efficient and effective use of school assets and the management of financial risk; ...

Work Health and Safety 2011

- 2.9 As public schools are workplaces, the *Work Health and Safety Act 2011* applies. Subsections 19(1) and 19(2) establish a primary duty of care:

- (1) A person conducting a business or undertaking must ensure, so far as is reasonably practicable, the health and safety of—

- (a) workers engaged, or caused to be engaged, by the person; and

- (b) workers whose activities in carrying out work are influenced or directed by the person, while the workers are at work in the business or undertaking.
- (2) A person conducting a business or undertaking must ensure, so far as is reasonably practicable, that the health and safety of other persons is not put at risk from work carried out as part of the conduct of the business or undertaking.

2.10 Subsection 19(3) of the *Work Health and Safety Act 2011* notes:

Without limiting subsections (1) and (2), a person conducting a business or undertaking must ensure, so far as is reasonably practicable—

- (a) the provision and maintenance of a work environment without risks to health and safety; and
- (b) the provision and maintenance of safe plant and structures; ...

2.11 Section 27 of the *Work Health and Safety Act 2011* requires an officer of a person conducting the business or undertaking or a person with management or control of a workplace to exercise due diligence to ensure that the person conducting the business or undertaking complies with their duties or obligations.

Policy and procedural guidance

Shared responsibility for school infrastructure management

2.12 Various strategic planning documents and other policies identify a ‘shared’ or ‘joint’ responsibility between the Education Support Office and schools for the management of school infrastructure assets.

2.13 The *Strategic Asset Management Planning Framework for ACT public schools* (May 2016) identifies a primary responsibility for schools in managing assets:

Each ACT public school is charged with the responsibility of managing their assets to deliver agreed learning outcomes.

2.14 However, the *Strategic Asset Management Planning Framework for ACT public schools* (May 2016) and *Strategic Asset Management Plan* (December 2016) also notes shared responsibility for the maintenance of assets. The *Strategic Asset Management Plan* (December 2016) states:

The management of ACT Public school facilities and assets is the joint responsibility of the Directorate and schools.

2.15 The *Strategic Asset Management Planning Framework for ACT public schools* (May 2016) and the *Strategic Asset Management Plan* (December 2016) consistently identify the role of the Infrastructure and Capital Works Branch in the Education Support Office as follows:

The Infrastructure and Capital Works Branch manages the Directorates capital resources and is responsible for undertaking programs including sustainment operations and maintenance, capital upgrades and capital works. The Branch provides the planning and oversight required to establish maintenance and capital upgrade programs across the school building and infrastructure portfolio as well as the design, construction and delivery of facilities to deliver quality learning environments for the ACT community.

School Management Manual

2.16 The *School Management Manual* provides further guidance on practical aspects of the shared responsibility for the management of school assets between the Education Support Office and the schools. Module 2 and Module 7 of the *School Management Manual* provide guidance on:

- funding for schools' operating costs; and
- allocation of responsibilities for school asset management and maintenance between schools and Education Support Office (as represented by the Infrastructure and Capital Works Branch).

Module 2

2.17 Module 2 of the *School Management Manual* relates to the School Operational Allocation, which is:

... cash funding to administer schools operational costs - excluding staffing expenditure. The funding allocation is to meet educational and school administration costs, including costs in relation to energy, water and sewerage, cleaning and minor maintenance.

2.18 The School Operational Allocation includes allocations for:

- student funding (for educational costs (excluding staffing) associated with curriculum, teaching aids and materials);
- corporate base funding (for general office, administration and communication expenses);
- physical infrastructure funding (for energy, water and sewerage, cleaning and minor maintenance); and
- other funding (for other sector or school-specific requirements or new school establishment costs).

2.19 By virtue of Module 2 of the *School Management Manual* schools have discretion in how the School Operational Allocation is spent, provided costs are contained 'within their global SOA budget, with a need to consider the attributes of economy, efficiency and effectiveness to achieve maximum benefit from the allocated resources'.

2.20 In relation to the School Operational Allocation Module 2 of the *School Management Manual* states:

The policy intent of the SOA is to allow greater school-based decision making in relation to school expenditure. This empowers schools and provides Principals greater control over how their budget and resources are allocated based on what works best for their school, within system-wide parameters.

Module 7

2.21 Module 7 of the *School Management Manual* acknowledges the shared responsibility between schools and the Education Support Office (as represented by the Infrastructure and Capital Works Branch):

The ACT Education Directorate manages a significant portfolio of school-based facilities and assets, with the responsibility for safety, optimal usage and effective upkeep shared between schools and Education Support Office.

2.22 Module 7 of the *School Management Manual* provides further practical guidance on administrative roles and responsibilities for school infrastructure asset management, including how responsibility for school infrastructure asset management is allocated between the Infrastructure and Capital Works Branch and the schools. Appendix A of this report summarises the allocation of responsibility between the Infrastructure and Capital Works Branch and the schools. In explaining the allocation of responsibility, Module 7 of the *School Management Manual* states:

The shared responsibilities for facility and asset management between the Education Support Office and schools noted within this module have been defined with consideration given to the following principles:

- Minimisation of risk, and improving the safety and well being of students, teachers and visitors.
- Localised school-based decision making where possible with repairs, maintenance and service purchasing coordinated at the school level to meet school need.
- Increased co-operation and co-ordination between schools in order to consolidate purchasing and reduce costs.
- Enhancing the role of the Infrastructure and Capital Works (ICW) branch in:
 - Coordinating and scoping whole-of-system procurement arrangements to benefit school-based purchasing; and
 - Coordinating high risk, infrequent, or regulatory works for the entire school system.

2.23 Module 7 of the *School Management Manual* includes procedural guides, which detail the responsibilities of the Infrastructure and Capital Works Branch and schools to ensure the effective upkeep of school facilities.

2.24 Module 7 of the *School Management Manual* omits defining responsibilities for specific maintenance tasks that are regularly recommended in school building condition assessment reports. This lack of definition may lead to confusion in the roles and responsibilities between the Branch and schools. An example of such maintenance tasks are recommendations associated with the pressure relief valves fitted to hot water units. Table 2-1 shows recommendations relating to pressure relief valves arising from the latest school building condition assessment reports for the schools selected for audit fieldwork.

Table 2-1 Recommendations relating to pressure relief valves (selected schools)

School	Recommendation	Date
Calwell High School	Pressure Relief Valves to be checked and serviced annually	October 2014
Gunghalin College	Service the PRVs annually	June 2013
Kingsford Smith School	Pressure relief valves require servicing annually	October 2013
Malkara School	All require annual servicing to PRVs	June 2014
Telopea Park School	All PRVs need to be checked annually	October 2013
Charles Weston School	N/A	N/A

Source: ACT Audit Office, based on Education Directorate information.

2.25 In Module 7 of the *School Maintenance Manual*, Part 7.16.2 of the Plumbing and Gas Services guide states:

Schools are responsible for:

- ...
- Arranging and paying the cost of routine plumbing repairs and maintenance for taps, toilets, drinking fountains, hot water units, boiling water units; ...

2.26 Whilst hot water units are mentioned, no mention is made of pressure relief valves in Module 7 of the *School Maintenance Manual*, and the placement of this responsibility in the Water and Sewer Pipes section of the Plumbing and Gas Services part of the Manual makes the requirement difficult to find.

2.27 When schools were asked to provide documentation to show that pressure relief valves had been serviced as per the recommendations of their school building condition assessment reports, some could not provide any evidence that pressure relief valves had been serviced, whilst some were not clear if it was the school's or the Infrastructure and Capital Works Branch's responsibility.

2.28 Module 7 of the *School Management Manual* provides practical guidance on administrative roles and responsibilities for school infrastructure asset management, including how responsibility for school infrastructure asset management is allocated between the Infrastructure and Capital Works Branch and the schools. Whilst Module 7 of the *School Management Manual* generally provides concise guidance with respect to responsibilities, the document does not always address tasks that regularly arise in building condition assessments. Module 7 of the *School Management Manual* could be more effective in documenting and clearly defining asset management responsibilities between schools and the Infrastructure and Capital Works Branch.

RECOMMENDATION 1 POLICY AND PROCEDURAL GUIDANCE

The Education Directorate should revise Module 7 of the *School Management Manual* to clearly identify responsibilities for repairs and maintenance activities between the Infrastructure and Capital Works Branch and schools, and in doing so ensure that there is consistency and clarity in language in both Module 7 and the building condition assessments reports.

Risks and challenges of shared responsibilities

- 2.29 While the Director-General of the Education Directorate has overall responsibility for the management of school infrastructure assets by virtue of the *Public Sector Management Act 1994* and the *Financial Management Act 1994*, the sharing of responsibilities between schools and the Education Support Office (represented by the Infrastructure and Capital Works Branch) presents administrative risks and challenges.
- 2.30 At present, schools and the Education Support Office (through the Infrastructure and Capital Works Branch) have responsibility for different aspects of a school and its infrastructure assets including, for example, responsibility for different parts of a school building. The demarcation of responsibility between the Infrastructure and Capital Works Branch and the schools increases the risk that the management of school infrastructure is uncoordinated. An added complication is that aspects of the Branch's repairs and maintenance activities are delivered by the ACT Property Group through a Service Level Agreement.
- 2.31 Furthermore, school infrastructure asset management should be undertaken with reference to long-term considerations, including the useful life of the asset and options for maintaining and preserving the asset. However, a number of factors increase the likelihood of short-term planning for school infrastructure management, and the risks associated with this, including:
- a focus on annual planning for repairs and maintenance activities at schools. Module 7 of the *School Management Manual* requires schools to develop an annual maintenance program. The preparation of an annual maintenance program reinforces a short-term focus on repairs and maintenance activities at the schools; and
 - annual funding rounds for Education Support Office repairs and maintenance programs. Each year the Infrastructure and Capital Works Branch seeks applications from schools for repairs and maintenance funding through its Specific Works Program. The annual funding round reinforces a short-term focus on repairs and maintenance activities.

- 2.32 The risks of uncoordinated activity between the Education Support Office (through the Infrastructure and Capital Works Branch) and the schools, and the risks of short-term planning, are best managed and mitigated through a well-planned and executed asset management system, which promotes rigorous development and application of policies and procedures that promote rationality and consistency in asset planning and management decisions. The extent to which this is achieved or not is discussed throughout this report.

School asset management system

- 2.33 The *Australian Standard on Asset Management (AS ISO 55000:2014) Asset management – Overview, principles and terminology* discusses the importance of an asset management system to ‘direct, coordinate, and control asset management activities’ of an organisation. The Standard states:

An asset management system is a set of interrelated and interacting elements of an organisation, whose function is to establish the asset management policy and asset management objectives, and the processes, needed to achieve those objectives. In this context, the elements of the asset management system should be viewed as a set of tools, including policies, plans, business processes and information systems, which are integrated to give assurance that the asset management activities will be delivered.

- 2.34 The *Australian Standard on Asset Management (AS ISO 55000:2014) Asset management – Overview, principles and terminology* further states:

An asset management system provides a structured approach for the development, coordination and control of activities undertaken on assets by the organisation over different life cycle stages, and for aligning these activities with its organisational objectives.

Strategic Asset Management Report

- 2.35 In support of the development of an asset management system for the Education Directorate, in May 2016 Deloitte provided a *Strategic Asset Management Report* to the Directorate. According to the report Deloitte was engaged to ‘design and develop strategic asset management principles and guidelines for the Directorate, provide a demonstration on how [digital/software asset information management system] may assist prioritising projects and assess the long term budget needs for the asset portfolio’.

- 2.36 The *Strategic Asset Management Report (2016)* stated:

The principles and guidelines developed for the Directorate provide the framework for the management of buildings, plant, equipment and associated infrastructure outlining the current environment including legislative considerations, strategic objectives for asset management. Implementation of supporting operational plans, procedures, asset information management system (technology solution) and regular performance monitoring will enable the Directorate to improve its asset investment decisions, financial performance and efficiency in asset management.

- 2.37 The *Strategic Asset Management Report (2016)* made six recommendations. These are discussed throughout this report where relevant.

Strategic Asset Management Planning Framework

2.38 In addition to the *Strategic Asset Management Report (2016)* Deloitte provided a *Strategic Asset Management Planning Framework for ACT public schools (May 2016)*. According to the *Strategic Asset Management Planning Framework for ACT public schools (May 2016)* its purpose is to:

... provide the principles and guidelines necessary to make informed decisions regarding the management of Schools buildings. Ultimately the objective is an asset portfolio that is effective and aligned with the strategic objectives of the ACT Government. Specifically the framework aims to the [sic] align the Directorates service delivery objectives for ACT public schools with the Directorates overarching asset management system; comprising the asset management policy, the strategic asset management plan, the asset management objectives, the integration of asset management information systems and the individual asset management plan(s).

2.39 The *Strategic Asset Management Planning Framework for ACT public schools (May 2016)* provides information on:

- the environment in which the Education Directorate operates, including funding, community and legislative influences on the operations of the directorate;
- the strategic objectives for the Education Directorate and their relevance to asset management;
- strategic asset management principles for the Education Directorate; and
- elements of a strategic asset management approach, including the key stages of asset management (asset planning, asset acquisition, operational planning, maintenance planning, asset disposal, asset funding and asset risk management).

2.40 The *Strategic Asset Management Planning Framework for ACT public schools (May 2016)* identifies the following strategic asset management principles for the Education Directorate:

In recognition that assets exist to support program delivery, the Principles of the [strategic asset management planning framework] are:

- ensuring service delivery requirements form the basis of asset decisions;
- integrating asset management with corporate, financial, business and budgetary planning;
- informed decision-making, incorporating a life-cycle approach to asset management;
- establishing accountability and responsibility for asset condition, use and performance; and
- pursuing sustainability, in providing for current and future resource needs.

2.41 The *Australian Standard on Asset Management (AS ISO 55000:2014)* notes the importance of an asset management system in providing 'a structured approach for the development, coordination and control of activities undertaken on assets by the organisation over different life cycle stages, and for aligning these activities with its organisational objectives'. In support of an asset management system for the Education Directorate, in May 2016 a *Strategic Asset Management Report* and an *Asset Management Planning Framework for ACT public schools* was prepared by consulting firm Deloitte. The Report, which included six

recommendations for improvement, and the Framework provided a sound basis for an asset management system for the Directorate, including ‘the principles and guidelines necessary to make informed decisions regarding the management of Schools buildings’.

Strategic Asset Management Plan

2.42 As noted in paragraph 2.33, the Australian Standard notes the importance of aligning the organisational goals and activities over the lifecycle of the assets. This alignment should be documented in a strategic asset management plan. The *Australian Standard on Asset Management (AS ISO 55000:2014) Asset management – Overview, principles and terminology* discusses the importance of developing a Strategic Asset Management Plan for the purpose of strategic planning for infrastructure assets:

An organisation’s [Strategic Asset Management Plan] should be used to guide the setting of its asset management objectives, and describe the role of the asset management system in meeting these objectives. This includes the structures, roles and responsibilities necessary to establish the asset management system and to operate it effectively...

The organisation should also use its [Strategic Asset Management Plan] to guide its asset management system in the development of its asset management plans (i.e. in establishing what to do).

2.43 The *Australian Standard on Asset Management (AS ISO 55000:2014) Asset management – Management systems – Guidelines for the application of AS ISO 55001* further states:

The [Strategic Asset Management Plan] should document the relationship between the organisational objectives and the asset management objectives, and should define the framework required to achieve the asset management objectives.

2.44 The *Australian Standard on Asset Management (AS ISO 55000:2014) Asset management – Management systems – Guidelines for the application of AS ISO 55001* further states:

The [Strategic Asset Management Plan] should be a high level plan that contains asset management objectives. It should be used to develop the asset management plan(s), which should set out the asset level activities. The asset management plan(s) can be cascaded in large organisations or in organisations with complex asset portfolios.

2.45 The *Strategic Asset Management Planning Framework for ACT public schools (May 2016)* provided further information on the development of a Strategic Asset Management Plan for the Education Directorate and what it should comprise:

The [Strategic Asset Management Plan] must be clearly linked with the management of other resources and the delivery of core services under the *Education Directorate’s Strategic Plan 2014-2017*.

The [Strategic Asset Management Plan] should comprise:

- an acquisition plan which defines the assets to be acquired or replaced in the planning period, and which establishes the sources and cost of funding acquisitions;
- an operational plan which defines the use of existing assets and may include matters such as access, security, accountability and monitoring performance;
- a maintenance plan defining which assets are to be maintained, the level of maintenance and the delivery of maintenance services;

- a disposal plan identifying assets to be disposed of in the planning period, the expected proceeds of disposal and the application of the proceeds;
- a funding plan which defines the options available for funding capital and recurrent asset costs; and
- a risk management plan which describes the risk management strategies and actions to be implemented for controlled assets.

Strategic Asset Management Plan (December 2016)

2.46 In December 2016 the Education Directorate developed a *Strategic Asset Management Plan*. The *Strategic Asset Management Plan* (December 2016) 'is a document that sets out the ACT Education Directorate's ... strategy for asset management and sustainable school buildings. The aim is to provide a secure, suitable, fit for purpose asset portfolio to enhance the ACT in providing a safe, healthy working environment for teaching and learning in the 21st century'.

2.47 The *Strategic Asset Management Plan* (December 2016) states:

The [Strategic Asset Management Plan] provides the Directorate with the guidance to undertake effective management of School building and infrastructure assets and also provides a consolidated document and guidance to assist, inform and enable the prioritisation of capital works, maintenance and major and minor works.

The [Strategic Asset Management Plan] enables the alignment of the Directorates' objectives, asset management objectives, current performance of the school building portfolio, the level of service required for each asset, and stakeholder expectations; with the optimal prioritisation of projects in accordance with the strategic objectives of the Directorate.

2.48 The *Strategic Asset Management Plan* (December 2016) provides high-level, summary information on:

- the priority and goals of the Education Directorate as well as broader ACT Government strategies and plans and their connection to asset management;
- the existing school infrastructure asset base, its age and location and strategies for determining and reporting on its condition;
- risks and challenges associated with asset management, including existing schools' capacity and projections for future demand;
- an overview of the Directorate's *Asset "Sustain" Strategies*, namely repairs and maintenance and capital works and upgrades; and
- asset acquisition and asset disposal considerations.

2.49 The *Strategic Asset Management Plan* (December 2016) is a high-level document that does not comprise (or otherwise refer to) the other elements envisaged or described in the *Strategic Asset Management Planning Framework for ACT public schools* (May 2016) (refer to paragraph 2.46) including: an acquisition plan; operational plan; maintenance plan; disposal plan; funding plan or a risk management plan. In this respect, however, the *Strategic Asset Management Plan* (December 2016) explicitly states that it focuses on 'two key areas of the Directorates expenditure being repairs and maintenance and capital

upgrade works'. The Plan acknowledges that the acquisition and disposal of assets have significant involvement from other stakeholders and processes and that the Plan 'will only lightly reference those activities'.

- 2.50 The *Australian Standard on Asset Management* (AS ISO 55000:2014) discusses the importance of developing a strategic asset management plan to guide an organisation's strategic asset planning, including '[documenting] the relationship between the organisational objectives and the asset management objectives, and [defining] the framework required to achieve the asset management objectives'. In support of this requirement the Education Directorate developed the *Strategic Asset Management Plan* (December 2016). The *Strategic Asset Management Plan* (December 2016) provides high-level, summary information on a range of considerations and activities for repairs and maintenance and capital upgrades of school infrastructure. This is useful in setting out the high-level context for the strategic asset management of school infrastructure.

Strategic asset planning

Asset management objectives

- 2.51 The *Australian Standard on Asset Management* (AS ISO 55000:2014) *Asset management – Management systems - Requirements* discusses the importance of establishing asset management objectives:

The organisation shall establish asset management objectives at relevant functions and levels.

When establishing its asset management objectives, the organisation shall consider the requirements of relevant stakeholders and of other financial, technical, legal, regulatory and organisational requirements in the asset management planning process.

- 2.52 The *Australian Standard on Asset Management* (AS ISO 55000:2014) *Asset management – Management systems - Requirements* further states:

The asset management objectives shall:

- be consistent and aligned with the organisational objectives;
- be consistent with the asset management policy;
- be established and updated using asset management decision-making criteria;
- be established and updated as part of the [Strategic Asset Management Plan];
- be measurable (if practicable);
- take into account applicable requirements;
- be monitored;
- be communicated to relevant stakeholders;
- be reviewed and updated as appropriate.

- 2.53 The *Australian Standard on Asset Management (AS ISO 55000:2014) Asset management – Management systems – Guidelines for the application of AS ISO 55001* states:

The asset management objectives, derived as part of the [Strategic Asset Management Plan], provide the essential link between the organisational objectives and the asset management plan(s) that describe how those objectives are going to be achieved. The asset management objectives transform the required outcomes (product or service) to be provided by the assets, into activities typically described in the asset management plan(s).

...

Asset management objectives should be specific, measurable, achievable, realistic and time-bound (i.e. “SMART” objectives). They can be both quantitative measurements (e.g. mean time between failure) and qualitative measurements (e.g. customer satisfaction).

- 2.54 When establishing asset management objectives, the *Australian Standard on Asset Management (AS ISO 55000:2014) Asset management – Management systems – Guidelines for the application of AS ISO 55001* notes:

... the organisation should:

- a) review risks, including the potential impacts from the failure of
 - assets, or
 - the asset management activities on achieving asset management objectives, individually or in combination;
- b) review the importance of assets related to their intended outcomes, objectives and product or service requirements;
- c) check the applicability of the asset management objectives during the asset management planning process.

- 2.55 The *Strategic Asset Management Planning Framework for ACT public schools* (May 2016) includes a section on ‘strategic objectives for asset management’, which states ‘key to the successful development of strategic asset management planning is clearly articulated organisational strategic objectives’. It then goes on to identify and summarise a series of whole-of-government strategic planning and infrastructure planning documents, as well as the Education Directorate’s own strategic plan at the time (the *ACT Education and Training Directorate Strategic Plan 2014-17*). No asset management objectives are identified or articulated which serve as ‘the essential link between the organisational objectives and the asset management plan(s) that describe how those objectives are going to be achieved’.

Property quality standards

- 2.56 Under the heading ‘Performance Criteria – Measures and Targets’ the *Strategic Asset Management Plan* (December 2016) acknowledges that ‘Product [sic] quality standards (PQS) are being developed as part of [asset management information system] implementation. These statements go beyond the condition of assets and incorporate functionality aspects that align with the strategic objectives of asset management’. The *Strategic Asset Management Plan* (December 2016) states ‘it is the intent of the Directorate to use such performance indicators to assess the performance of school building assets and asset components. The outcome of the assessment will identify if the assets are being appropriately used, maintained and are fit for purpose’.

- 2.57 In the absence of explicit asset management objectives, the property quality standards have the potential to serve a similar function, and serve as a basis for assessing the performance of school infrastructure assets.
- 2.58 At the time of the audit, the Education Directorate had prepared property quality standards for school canteens, toilets and carparks. By way of example, Table 2-2 shows the property quality standards for school canteens. Property quality standards had not been developed for any other categories of assets.

Table 2-2 Example property quality standards for school canteens

Canteen
Is the layout adequate to support sequential preparation and assembly of food items?
Does the work environment have slip resistant floors?
Is there good lighting to carry out tasks safely?
Is there adequate ventilation?
Is there air conditioning to the canteen?
Is the level of noise generated by items such as the exhaust hood acceptable?
Is there adequate hand washing facilities?
Is the canteen located centrally in the school?
Is the canteen facing a central outdoor space?
Is there good line of sight to external service counter?
Are the work surfaces resilient and hygienic?
Are the cupboards in good working order?
Is service counter able to cater to the needs of students of all year levels?
Does the layout of the servery area avoid student crowding so as to discourage bullying and other antisocial behaviour?
Is the service counter accessible to any user?

Source: ACT Audit Office, based on Education Directorate information.

- 2.59 The *Australian Standard on Asset Management* (AS ISO 55000:2014) discusses the importance of '[establishing] asset management objectives at relevant functions and levels'. The Education Directorate has not identified or articulated asset management objectives which serve as 'the essential link between the organisational objectives and the asset management plan(s) that describe how those objectives are going to be achieved'. Nevertheless, the *Strategic Asset Management Plan* (December 2016) identified that the Directorate was in the process of developing property quality standards, which the Directorate would use 'to assess the performance of school building assets and asset components [and] identify if the assets are being appropriately used, maintained and are fit for purpose'. Once developed, the property quality standards could usefully serve as asset management objectives but, at present, they are of limited use because they have only been developed for some school infrastructure assets (school canteens, toilets and

carparks) and they have not been incorporated within the asset management information system. They are not serving as a means to measure, report and review asset infrastructure performance.

RECOMMENDATION 2 PROPERTY QUALITY STANDARDS

The Education Directorate should complete the development of property quality standards, and incorporate them into the asset management system. Property quality standards should then be used to assess the performance of assets and identify if the assets are being appropriately used, maintained and are fit for purpose.

Operational asset management planning

2.60 As noted in paragraph 2.50, the *Strategic Asset Management Plan (2016)* provides high level summary information of the activities for the repair and maintenance of school infrastructure. To support this high level summary, asset management plans should be developed to provide more detail of the activities to be undertaken. The *Australian Standard on Asset Management (AS ISO 55000:2014) Asset management – Management systems – Guidelines for the application of AS ISO 55001* describes the importance of developing operational asset management plans to support the Strategic Asset Management Plan:

The organisation should develop an asset management plan(s) to define the activities that will be implemented and the resources that will be applied to meet the asset management objectives and consequently the organisational objectives. An asset management plan(s) provides the direction to, and expectations for, an individual asset or for a portfolio, group or class of assets.

2.61 The *Australian Standard on Asset Management (AS ISO 55000:2014) Asset management – Management systems – Guidelines for the application of AS ISO 55001* states:

An asset management plan(s) should be documented at a level that is appropriate to the organisation and the degree of sophistication in its asset management approach. There is no set formula for what should be included or how it should be structured, however, it is common practice for such an asset management plan(s) to contain a rationale for asset management activities, operational and maintenance plans, capital investment (overhaul, renewal, replacement and enhancement) plans, and financial and resource plans, often based on a review of earlier achievements.

For some organisations, this may be captured in a single document, while for other organisations multiple asset management plans may be appropriate. ...

Asset management plan(s) should be developed to appropriate time horizons for the organisation. The time horizons should meet the organisation's needs and take account of the organisation's period of responsibility and the life of its assets.

2.62 The *Australian Standard on Asset Management (AS ISO 55000:2014)* envisages that the development of operational asset management plans, and the level at which they are developed and the assets for which they are developed, is flexible and may be determined by the organisation.

2.63 The development of operational and asset management plans was the first recommendation of the *Strategic Asset Management Report* (May 2016):

Implement an integrated asset management system which aligns with the ISO55000 standard by building on the strategic asset management framework.

An asset management system is the set of interrelated or interacting elements that establish asset management policy, asset management objectives and processes to achieve those objectives.

- Develop the asset management strategy and operational plans to deliver the strategic objectives of the Directorate.
- Develop asset management plans, which can be aggregated by school, network and asset type to inform the long term strategic asset planning for the Directorate.

2.64 The *Strategic Asset Management Planning Framework for ACT public schools* (May 2016) provided further impetus for the development of operational plans for school infrastructure assets:

The Directorate should establish and maintain management processes to regularly monitor and assess the assets under their control.

Operational plans align the management of assets with the delivery requirements and organisational objectives of the asset to support effective and efficient management of the asset.

...

An operational plan should address:

- responsibility for the asset;
- arrangements for monitoring asset performance;
- operational training; and
- estimated operating costs.

2.65 The *Australian Standard on Asset Management* (AS ISO 55000:2014) notes the importance of developing operational asset management plans which outline activities that will be implemented and resources required to implement a strategic asset management plan. The first recommendation from the *Strategic Asset Management Report* (May 2016) was for the Education Directorate to develop asset management plans ‘which can be aggregated by school, network and asset type to inform the long term strategic asset planning for the Directorate’. No operational asset management plans have been prepared or developed by the Directorate. The lack of operational or asset management plans means that high-level strategic asset management planning issues and considerations identified in the *Strategic Asset Management Plan* (December 2016) are not translated into specific, documented and actionable asset management activities.

RECOMMENDATION 3 OPERATIONAL ASSET MANAGEMENT PLANS

The Education Directorate should develop operational asset management plans for its school infrastructure assets. The plans should contain information to inform long term strategic asset planning for the Education Directorate and should address matters such as responsibility for the asset, arrangements for monitoring asset performance, operational training and estimated operating costs.

Maintenance planning

2.66 Maintenance planning is a key aspect of operational and asset management planning. The *Strategic Asset Management Planning Framework for ACT public schools* (May 2016) acknowledges the importance of asset maintenance plans, noting:

Asset maintenance plans support the Directorate in undertaking maintenance activities in a targeted and timely manner which facilitates the most cost-effective use of maintenance resources, and protects the value of the Directorate's portfolio of properties.

2.67 The *Strategic Asset Management Planning Framework for ACT public schools* (May 2016) provides information on the nature and features to be expected of an asset maintenance plan:

A maintenance plan:

- defines the asset and the level to which it is to be maintained, consistent with the role that the asset will play in the delivery of services;
- describes the systems and procedures to be used to plan and manage the maintenance work;
- specifies the types of maintenance to be carried out, and why;
- nominates the means of resourcing and implementing maintenance;
- indicates any requirements for plant, equipment or spare parts; and
- outlines the projected costs of maintenance, as well as forecasting major replacements.

Once a comprehensive maintenance plan has been developed for an asset, it must be translated into an annual maintenance plan which details the maintenance tasks to be performed each year. The maintenance plan should include a statement of resource requirements.

2.68 The *Strategic Asset Management Planning Framework for ACT public schools* (May 2016) states:

In the initial stages of developing a maintenance plan, the Directorate should assess the condition of existing assets to determine which assets need to be maintained. For each of those assets or groups of assets that are to be regularly maintained, the agency should develop a maintenance plan.

2.69 The *Strategic Asset Management Planning Framework for ACT public schools* (May 2016) discusses the importance of developing asset management plans for school infrastructure assets and translating these into 'an annual maintenance plan which details the maintenance tasks to be performed each year'. Comprehensive asset maintenance plans

have not been developed for ACT public school infrastructure assets, as required by the *Strategic Asset Management Planning Framework for ACT public schools* (May 2016).

Annual maintenance plans for schools

2.70 The *Strategic Asset Management Plan* (December 2016) establishes a requirement for schools to prepare annual maintenance plans. In doing so it highlights the importance of identifying those assets that are rated as “1A” which means that the asset is a “Critical” asset that is rated as “Run Down”:

To inform future maintenance planning and capital works, each school is requested to submit an annual maintenance plan. The annual maintenance plan is to highlight key maintenance activities to be undertaken by each school throughout the year and includes any condition assessment 1A ratings.

2.71 Module 7 of the *School Management Manual* also establishes a requirement for schools to prepare an annual maintenance program:

Schools are required to develop an Annual Maintenance Program (PG7.11.3a) which takes into consideration known scheduled maintenance, as well as budgeting for unscheduled R&M and urgent repair work.

2.72 In practice, the requirement for an annual maintenance plan as described by the *Strategic Asset Management Plan* (December 2016) and the requirement for an Annual Maintenance Program as described by Module 7 of the *School Management Manual* has been regarded as the same.

2.73 The Infrastructure and Capital Works Branch has developed a sample maintenance plan template to assist ACT public schools in fulfilling the requirement to develop an annual maintenance program. The sample maintenance plan template has a twelve-month calendar year timeframe and allows for the allocation of a dollar amount to a series of line items allocated to four overall categories:

- mandatory maintenance;
- minor project/renovation maintenance;
- unforeseen maintenance; and
- grounds maintenance.

2.74 The sample maintenance plan template does not prompt schools to identify and report asset condition assessments, nor does the template facilitate the:

- definition of an asset and the level to which it is to be maintained, consistent with the role that the asset will play in the delivery of services;
- description of the systems and procedures to be used to plan and manage the maintenance work;
- specification of the types of maintenance to be carried out, and why;
- nomination of the means of resourcing and implementing maintenance; and

- indication of any requirements for plant, equipment or spare parts.

2.75 The sample maintenance plan template allows for recognition of projected costs of maintenance, albeit only for twelve months, but does not facilitate forecasting of major replacements. The focus on an annual maintenance plan, with a twelve-month calendar year horizon, in the absence of operational asset management plans, does not facilitate longer-term infrastructure asset management planning.

Maintenance plans prepared by schools

2.76 For the six schools that were considered as part of the audit there was considerable variability in what was presented to the Audit Office as a maintenance plan. One school had not prepared a maintenance plan and one school advised that it was in the process of drafting a maintenance plan. For the remaining schools:

- one had a maintenance plan that was primarily a record of when each room in the school was last painted and recarpeted. It listed each room and outside area of the school (such as oval, fences and playgrounds) and documented when (year) each room was last painted, new carpet/flooring, furniture and blinds were installed;
- two schools had maintenance plans that listed maintenance requirements for some types of assets, as well as maintenance activities conducted over time; and
- one had a maintenance log, this was a record of requests for reactive maintenance. It recorded each problem, where it was, who requested it, when it was requested and when it was actioned. The maintenance log did not contain any scheduled maintenance and was not informed by the most recent building condition assessment of the school. Maintenance recommended by the building condition assessment did not occur at this school due to a lack of budget.

2.77 None of the maintenance plans followed the sample maintenance plan template that was provided with Module 7 of the *School Management Manual*. Each maintenance plan was unique with respect to the assets and maintenance activities that were addressed.

2.78 The sixth school which was considered for this audit, the Charles Weston School, had a detailed asset maintenance plan for the school infrastructure. The plan was included in an Infrastructure Maintenance Services Agreement with the Joss Group, who was contracted to design, construct and maintain the school. The Infrastructure Maintenance Services Agreement outlines the planned maintenance activities for a five year period for a range of assets as well as required compliance checks.

2.79 The *Strategic Asset Management Plan* (December 2016) establishes a requirement for schools to prepare annual maintenance plans and Module 7 of the *School Management Manual* establishes a requirement for schools to prepare an annual maintenance program. In practice these have been regarded as the same thing. In support of this requirement the Infrastructure and Capital Works Branch has developed a sample maintenance plan template to assist ACT public schools and their development of annual maintenance

plans. The sample maintenance plan template has a twelve-month calendar year timeframe and allows for the allocation of a dollar amount to a series of line items allocated to four overall categories. The template does not prompt schools to identify and report asset condition assessments and does not facilitate forecasting of major replacements. In the absence of operational asset management plans, the annual maintenance plans, with a twelve-month calendar year horizon, do not facilitate effective infrastructure asset management planning. For the six schools that were considered as part of the audit there was considerable variability in what was presented to the Audit Office as a maintenance plan; one school had not prepared a maintenance plan and one school advised that it was in the process of drafting a maintenance plan. Maintenance plans prepared by the other schools varied in their purpose, quality and comprehensiveness.

RECOMMENDATION 4 ANNUAL MAINTENANCE PLANS

The Education Directorate should prepare and execute comprehensive annual maintenance plans for school infrastructure assets, which outline the specific tasks which are to be undertaken during the year as well as the estimated resources and cost of maintenance activities. The annual maintenance plans should align with, and support, operational asset management plans to be developed as part of Recommendation 3.

Condition assessments

2.80 Various Education Directorate asset management strategic planning documents discuss the importance of, and establish the requirement for, the conduct of condition assessments of school infrastructure assets. The *Strategic Asset Management Planning Framework for ACT public schools* (May 2016) notes 'a structured condition assessment process must be part of any condition-based maintenance strategy which should be incorporated into the maintenance planning process'. The *Strategic Asset Management Plan* (December 2016) further states:

Condition assessments provide sufficient information to the Directorate and the school on the condition of buildings and building infrastructure to support informed asset management decisions and strategies in line with the service delivery requirements.

2.81 Both the *Strategic Asset Management Planning Framework for ACT public schools* (May 2016) and the *Strategic Asset Management Plan* (December 2016) discuss the conduct of condition assessments as part of a rolling program of audits, where each school would be audited once every three years. This period is determined by the Education Directorate in the absence of any legislated requirements:

The Directorate is required to conduct asset condition assessments for all ACT public schools. The condition assessments are to be undertaken for each school on a three year rolling basis.

2.82 The *Strategic Asset Management Planning Framework for ACT public schools* (May 2016) states:

The assessment should provide sufficient information on the condition of the building to support informed asset management decisions in line with the service delivery requirements.

...

A condition standard rating for each building must be documented, having consideration for the:

- building's physical condition
- functional purpose
- operating environment; and
- future plans and associated costs in relation to proposed refurbishments, upgrades, replacement or disposal.

2.83 The *Strategic Asset Management Plan* (December 2016) provides further information and guidance on the conduct of building condition assessments including standard rating definitions for conditions (a five-rating scale from "Excellent" to "Run Down") and standard ratings for maintenance (a four-rating scale from "Discretionary" to "Critical") with timings for action (from within one year to within four to five years).

2.84 Module 7 of the *School Management Manual* clearly identifies responsibility for the conduct of building condition assessments with the Infrastructure and Capital Works Branch in the Education Support Office:

A building condition assessment is organised by ICW every three years for each ACT public school. The cost of the School Building Condition Assessment report is paid by ICW.

The School Condition Assessment Reports allow ICW to maintain a snapshot of the school system's overall building quality. The reports also provide specific advice on potential future works requirements and identifies trends across the school system. They also assist schools in programming and scheduling maintenance work over the following three years.

The reports also assist ICW to determine infrastructure planning priorities for the school system.

2.85 The Infrastructure and Capital Works Branch of the Education Support Office coordinated a rolling program of building condition assessments for schools up to 2014. The building condition assessments were conducted every three years for schools. The building condition assessment reports included an average rating of the overall assets, a detailed assessment of individual assets within the school and also included an indicative maintenance plan for school infrastructure assets over a five year period, including the identification of priority items. The building condition ratings and definitions included in the reports followed guidance in line with the *Strategic Asset Management Plan* (December 2016).

- 2.86 The building condition assessment reports were used by Infrastructure and Capital Works Branch and schools to plan maintenance works. The Branch provided the schools with a copy of the building condition assessment reports and advised priority works that had been identified with an estimated cost of more than \$5 000 would be undertaken by the Branch. The Branch requested that priority works that had been identified costing less than \$5 000 be completed by the schools within three months of receiving the report.
- 2.87 The Infrastructure and Capital Works Branch within the Education Support Office scaled back the rolling program of building condition assessments in 2014, and in 2018 the program was stopped. The decision to stop the program and the rationale for stopping the program of audits is not documented. Representatives of the Branch advised that they found the ranking of priority maintenance tasks arising from the building condition assessments was not accurate, and that a substantial amount of information that was collected in assessments was being collected by other programs. Branch representatives advised that due to definitions used to rank priority tasks some minor tasks were given the same priority as major works.
- 2.88 In June 2019 the Infrastructure and Capital Works Branch commenced a procurement process to engage a contractor to undertake a rolling program of building condition assessments. Two firms responded, but neither of the tenders was assessed as representing value for money and, as a result, a service provider has not been engaged. Representatives of the Branch advised they intend to in-source this capability from within the Branch.
- 2.89 Notwithstanding that the rolling program of building condition assessments has not been in place since 2014, audits and assessments of specific school infrastructure risks have occurred, including roof safety systems, electrical switchboards, photo-voltaic installations, asbestos containing materials, lifts, and fire detection and fire suppression systems. These have recently been facilitated through the ACT Property Group and have been undertaken to ensure that safety and legislative compliance requirements have been met.
- 2.90 The *Strategic Asset Management Planning Framework for ACT public schools* (May 2016) and the *Strategic Asset Management Plan* (December 2016) require that building condition assessments be conducted for each ACT public school every three years. The Infrastructure and Capital Works Branch coordinated building condition assessments for schools up to 2014 through a rolling program. The rolling program of building condition assessments was scaled back in 2014 and stopped in 2018. In June 2019 the Infrastructure and Capital Works Branch commenced a procurement process to engage a contractor to undertake a rolling program of building condition assessments, but this procurement activity did not lead to the identification of an acceptable, value for money service provider. The lack of contemporaneous building condition assessment data through a rolling program of assessments across ACT public schools impairs the ability of the Education Directorate to effectively plan and manage its repairs and maintenance activities.

Asset Management Information System

2.91 The conduct of building condition assessments, and the maintenance and collection of the condition assessment data, is closely related to the development and implementation of an asset management information system. The *Strategic Asset Management Planning Framework for ACT public schools* (May 2016) stated:

The Directorate should manage and maintain an Asset Management Information System (AMIS) which enables the collection, collation, management, analysis and use of asset data.

An AMIS is the central repository for building, plant, equipment and infrastructure data including:

- land value;
- building size;
- asset replacement values;
- components (e.g. HVAC, doors, doorframes);
- condition assessment ratings;
- operating expenditure;
- repairs and maintenance expenditure; and
- key performance indicators (KPIs).

2.92 The *Strategic Asset Management Planning Framework for ACT public schools* (May 2016) further stated:

The results of condition assessments shall be incorporated into the Directorates AMIS. Effective interrogation of the condition assessments over a period of time should provide the Directorate with the ability to plan and forecast maintenance requirements.

2.93 The *Strategic Asset Management Planning Framework for ACT public schools* (May 2016) further noted:

The AMIS provides the base line data required to determine the current cost profile of the School asset portfolio as well as providing for analysis and reporting from an asset life cycle perspective. Used as a planning tool, the AMIS provides the Directorate with the ability to:

- plan for the renewal, upgrading and acquisition of assets;
- prioritise, rank and cost work programmes based on evidence and risk;
- incorporate long term condition forecasts;
- set budgets for various work programmes;
- identify funding gaps;
- enable the measurement of asset management performance over time;
- benchmark;
- evaluate performance of assets and against strategic asset management objectives and principles;
- record life cycle costs of each asset linking to historical and planned maintenance and refurbishment works; and

- report on the projected expenditure programs to then align with reporting commitments to CMTEDD.

This provides the Directorate the capability to systematically plan for, and continually invest in, asset maintenance, renewal and replacement.

2.94 In 2016, at the time of the *Strategic Asset Management Report (2016)*, the Directorate was in the process of implementing SPM Assets as its asset management information system. This was acknowledged in the *Strategic Asset Management Report (2016)*, and was the subject of the third recommendation of the *Strategic Asset Management Report (2016)*:

Implement an asset management information system (technology solution) for the detailed management and lifecycle planning for all assets.

This may include the continuation of the SPM Assets implementation and application of identified modules to support lifecycle planning, budgeting and forecasting over a 10 to 30 year period.

2.95 In making the recommendation, the *Strategic Asset Management Report (2016)* noted:

Work is currently underway to implement SPM Assets as the technology solution for the management of asset data and information. The functionality available within SPM Assets and select modules associated with it, will provide the Directorate with a centralised system for management of asset data and management, including the ability to plan works programs and financial projections over a 30 year period.

2.96 In late 2015, the Education Directorate purchased SPM Assets as its asset management information system. As at August 2019, the Infrastructure and Capital Works Branch had populated this system with asset information about all its public schools (except the Margaret Hendry School, which opened in January 2019). The information entered for each school identifies:

- separate functional spaces within the schools such as halls, libraries, administration offices, gymnasiums and buildings; and
- components such as plant and equipment within these spaces.

2.97 The Infrastructure and Capital Works Branch has entered building data for all schools, but has only entered condition assessment data for two schools, as part of a pilot exercise in November 2018. No building condition assessment data is in the system for other schools. SPM Assets is not being effectively used to plan and manage school infrastructure assets.

2.98 SPM Assets was purchased for \$52,500 (GST ex) in 2015, with an initial annual subscription cost for core modules of \$18,600 (GST ex). Since then the Education Directorate has paid an ongoing subscription and support cost of \$8,865 (GST ex) every three months, i.e. \$35,460 (GST ex) each year.

2.99 In late 2015, the Education Directorate purchased SPM Assets as an asset management information system. It was purchased for \$52,500 (GST ex) in 2015, with an initial annual subscription cost for core modules of \$18,600 (GST ex), and since then the Education Directorate has paid an ongoing subscription and support cost of \$8,865 (GST ex) every three months, i.e. \$35,460 (GST ex) each year. The Infrastructure and Capital Works Branch entered building condition assessment data for two schools as part of a pilot exercise in November 2018, but no other building condition assessment data is in the system for other schools. SPM Assets is not being effectively used to assist in the planning and management of school infrastructure assets.

RECOMMENDATION 5 BUILDING CONDITION ASSESSMENTS

The Education Directorate should:

- a) recommence its rolling program of building condition assessments; and
- b) populate its asset management information system, SPM Assets, with the results of the building condition assessments in order to facilitate and inform asset maintenance planning.

3 REPAIRING AND MAINTAINING SCHOOL INFRASTRUCTURE ASSETS

- 3.1 Repairing and maintaining school infrastructure assets are asset management activities. Repairing and maintaining an asset involves restoring, remediating, replacing or renewing it to either its original condition or a condition where it continues to fulfil its required purpose.

Summary

Conclusion

In 2018-19 the Education Directorate spent \$26.71 million on repairs and maintenance activities. These were undertaken through the *Annual Works Program* (a program of routine inspection and maintenance activities of specific school assets managed by the ACT Property Group through a Service Level Agreement), the *Specific Works Program* (a program managed by the Education Support Office through which schools submit requests for funding for repairs and maintenance activities) and by schools themselves using their annual School Operational Allocation funding. The poor systems and processes identified in Chapter 2 of this report, including the lack of asset management objectives for school infrastructure assets, operational asset management planning and building condition data, increases the risk that any repairs and maintenance activity that is undertaken through the different programs is costly, reactive and uncoordinated.

The Education Directorate does not have a clear understanding whether the *Annual Works Program* delivered by the ACT Property Group is being delivered efficiently and effectively. While a program of works was delivered by the ACT Property Group in 2018-19, the program budget was exceeded due to an increase in reactive maintenance costs (i.e. repairs and maintenance activities that are identified and undertaken following planned inspections) and the ACT Property Group charged a 12 percent management fee on top of actual costs. While the Education Directorate expects to have benefits from this arrangement, through efficiencies from economies of scale and better school infrastructure management outcomes, without any documentation to justify the creation of the agreement, or baseline data against which to judge financial performance, the effectiveness and efficiency of the arrangement cannot be determined. Furthermore, the lack of information on the purpose, intention or scope of the *Specific Works Program*, as well as insufficient documentation to support funding decisions, impairs the program's effectiveness and its contribution to school infrastructure management.

The majority of repairs and maintenance managed by schools is reactive maintenance, rather than the preferred and more cost-effective planned maintenance. Maintenance planning by schools is limited. When maintenance is planned, it is of a general nature rather than a specific task where a quotation could be provided by a contractor. As a result, school repair and maintenance requirements are not effectively managed, with the cost of most planned

maintenance being unknown. Reactive maintenance by its nature is more expensive than planned maintenance, and this is reflected in the expenditure by schools on repairs and maintenance. Schools consistently reported expenditure on repairs and maintenance that was above funding through the School Operational Allocation.

Key findings

	Paragraph
<p>The ACT Property Group provides ‘maintenance management services’ to the Education Directorate for school infrastructure-related repairs and maintenance for the <i>Annual Works Program</i> through a Service Level Agreement. The services provided by the ACT Property Group through the <i>Annual Works Program</i> comprise routine, compliance-based inspections and preventive maintenance related to legislative and health and safety compliance activities. The Service Level Agreement is described as an ongoing agreement with a ‘[twelve] month annual budget review’. It commenced on 2 July 2018, but was signed on 28 June 2019. The Service Level Agreement described services to be delivered to 30 June 2019, including a schedule of activities across 2018-19 and payments to be made each month for the services, and in July 2019 a schedule of activities for 2019-20 and associated payments for these services were agreed by the parties.</p>	3.19
<p>In 2018-19 the ACT Property Group charged the Directorate \$4.9 million for repairs and maintenance services provided through the Service Level Agreement. (This figure includes a twelve percent management fee charged by the ACT Property Group for the services. The figure does not include services provided by the ACT Property Group through other programs and activities). The cost of reactive maintenance services provided through the Service Level Agreement was \$2.25 million against a budget of \$1.33 million, an increase of \$0.91 million (69 percent). The twelve percent management fee was also charged in addition to this amount. Prior to entering into the Service Level Agreement with the ACT Property Group, no documentation was prepared by the Directorate justifying the arrangement including the expected benefits and the risks and costs of entering into such an arrangement. By managing these activities centrally through the ACT Property Group, the Directorate advised that it sought to achieve efficiencies from economies of scale and better school infrastructure management outcomes as well as a reduction in administrative effort on the part of the Infrastructure and Capital Works Branch. The lack of baseline data on the cost of these activities, and the effectiveness of their management prior to being delivered by the ACT Property Group, as well as the fact that the ACT Property Group has only been delivering these services for a comparatively short time (less than six months in some instances), means the efficiency and effectiveness of the arrangement cannot be determined.</p>	3.40
<p>The School Infrastructure Management Team within the Infrastructure and Capital Works Branch manages the <i>Specific Works Program</i> for ‘major repair works and planned maintenance programs that are not school responsibilities under the Schools Operational Allocation (SOA) guidelines’. There is no specific description of the <i>Specific Works Program</i>, its purpose, intention or scope, and no guidelines have</p>	3.60

been developed to assist the Infrastructure and Capital Works Branch decision-making for the program. In 2016-17 a total of \$3.9 million was spent under the program, but this has since declined to \$2.6 million in 2018-19. ACT public schools typically request funding for activities well in excess of the program budget, with \$14.3 million sought in 2016-17 and \$16.2 million sought in 2017-18 (poor documentation and record-keeping means there is no consolidated list of funding requests from ACT public schools for 2018-19). In the absence of guidelines or funding criteria the Infrastructure and Capital Works Branch exercises considerable discretion in its decision-making under the program, but for the three years to 2018-19 there has been insufficient documentation of funding decisions. Poor documentation and record-keeping associated with the program, including a lack of information on the purpose, intention or scope, as well as insufficient documentation of funding criteria means that the effectiveness of the *Specific Works Program* in contributing to the management of school infrastructure assets cannot be determined.

A review of ACT public schools' allocation of repairs and maintenance funding through the School Operational Allocation and expenditure on repairs and maintenance as recorded in the Directorate's MAZE management information system shows: for 2017 schools were allocated a total of \$5.2 million in funding, but reported spending a total of \$6.9 million; and for 2018 schools were allocated a total of \$5.4 million in funding, but reported spending a total of \$8.2 million. This suggests that ACT public schools are using other components of the School Operational Allocation to pay for repairs and maintenance activities or are funding repairs and maintenance activities through other sources of revenue. 3.67

A review of the six schools selected as part of the audit and their repairs and maintenance expenditure shows: 3.70

- for 2017 and 2018 five of the six schools recorded repairs and maintenance expenditure in the MAZE management information system in excess of the notional allocation of funding through the School Operational Allocation. The schools reported expenditure of between 32 to 161 percent more than was allocated (\$32 865 and \$109 821 respectively); and
- for 2017 and 2018 five of the six schools reported repairs and maintenance expenditure to the school community through the school Board in excess of the amount reported in the MAZE management information system. It is possible that school board reports include expenditure for other minor works, which are not categorised as repairs and maintenance expenditure in the MAZE management information system.

Schools are undertaking repairs and maintenance activities, though evidence shows that the majority of these works are reactive maintenance, rather than planned maintenance. Comprehensive asset management processes, including building condition assessments and annual maintenance planning would assist with planned maintenance activities that are expected to reduce the amount of more expensive reactive maintenance. 3.77

Education Support Office

3.2 Module 7 of the *School Management Manual* acknowledges the shared responsibility between schools and the Education Support Office (as represented by the Infrastructure and Capital Works Branch) in repairing and maintaining school infrastructure:

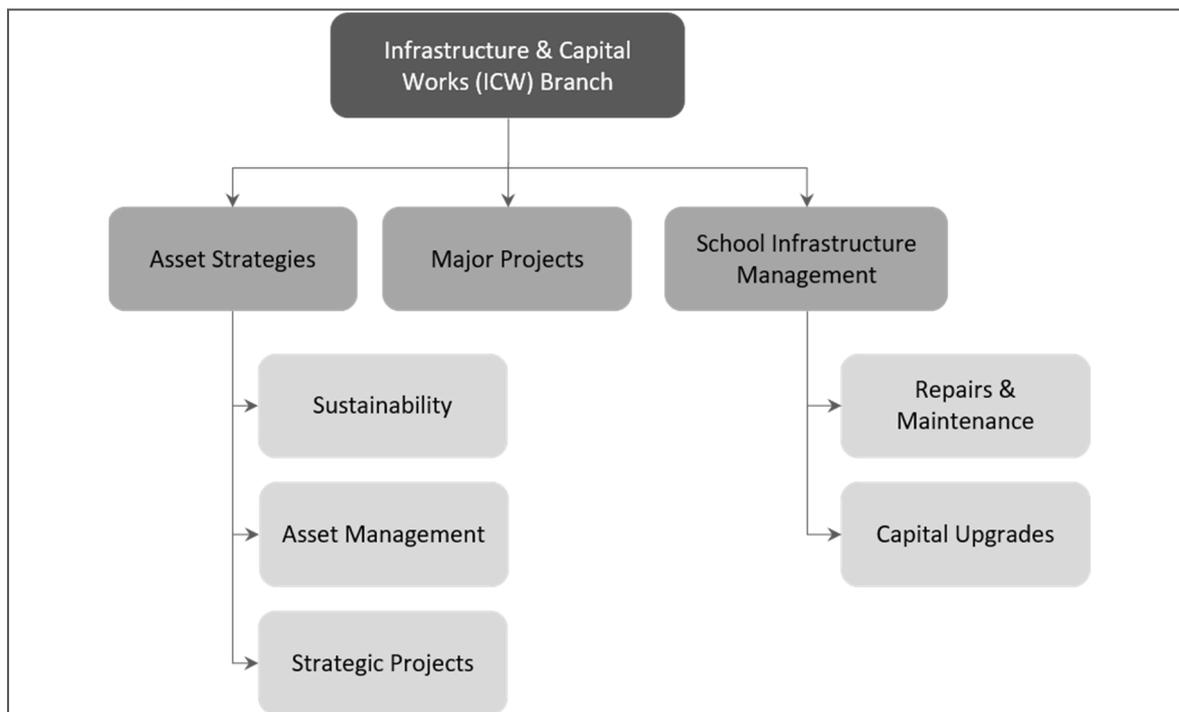
The ACT Education Directorate manages a significant portfolio of school-based facilities and assets, with the responsibility for safety, optimal usage and effective upkeep shared between schools and Education Support Office.

3.3 Module 7 of the *School Management Manual* provides further practical guidance on administrative roles and responsibilities for school infrastructure asset management. Appendix A provides information on how responsibilities for school infrastructure asset management are allocated between the Infrastructure and Capital Works Branch and the schools according to the *School Management Manual*.

Infrastructure and Capital Works Branch

3.4 The Infrastructure and Capital Works Branch (part of the Business Services Group) comprises three sections: Asset Strategies; Major Projects; and School Infrastructure Management. Figure 3-1 shows the Infrastructure and Capital Works Branch and the programs it manages.

Figure 3-1 Structure of the Infrastructure and Capital Works Branch (including programs)



Source: ACT Audit Office, based on Education Directorate information

3.5 The Infrastructure and Capital Works Branch manages three programs for the purpose of school infrastructure and facilities:

- the *Repairs and Maintenance Program*;
- *Capital Upgrades Program*; and
- *Major Projects*.

Repairs and Maintenance Program

3.6 The *Repairs and Maintenance Program* is the key program for the repairs and maintenance of schools. Within the overall *Repairs and Maintenance Program* there are two components:

- the *Annual Works Program*; and
- the *Specific Works Program*.

3.7 The ACT Property Group currently manages the *Annual Works Program* on behalf of the Education Directorate. It represents the bulk of the Education Directorate's *Repairs and Maintenance Program*. The *Specific Works Program* is managed by the Infrastructure and Capital Works Branch.

Capital Upgrades Program

3.8 The *Capital Upgrades Program* is the key program for capital works for school infrastructure. The School Infrastructure Management Team within the Infrastructure and Capital Works Branch manages the program. It directly manages the procurement and delivery of approximately 30 percent of activity under the program, whilst the Infrastructure Finance and Capital Works Branch (part of the Chief Minister, Treasury and Economic Development Directorate) manages the procurement and delivery of 70 percent of the works (often the more expensive and complex works).

Major Projects

3.9 Major Projects includes new capital projects with a value that is typically over \$5 million; this includes business cases for the delivery of new schools and school renewal programs. The Major Projects Team within the Infrastructure and Capital Works Branch manages the program.

Annual Works Program

3.10 The *Annual Works Program* is a program of inspections and preventive maintenance for a range of school infrastructure services and activities. The *Annual Works Program* has been progressively managed and delivered by the ACT Property Group through a Service Level Agreement with the Directorate. Prior to the Service Level Agreement with the ACT Property Group, the repairs and maintenance activities undertaken through the *Annual Works Program* were managed by the Infrastructure and Capital Works Branch.

Service Level Agreement

3.11 A Service Level Agreement has been developed between the Directorate and the ACT Property Group for school infrastructure management services to be provided by the ACT Property Group. The date of commencement for the Service Level Agreement was 2 July 2018 but the agreement was signed on 28 June 2019, i.e. a year after its purported commencement.

3.12 The Service Level Agreement sets out 'maintenance management services' to be undertaken by the ACT Property Group on behalf of the Directorate. The Service Level Agreement sets out services to be provided in three tranches:

- Tranche 1 (from 2 July 2018)
 - automatic doors
 - rock climbing walls
 - lifts
 - playgrounds (primary schools)
 - playgrounds (preschools)
- Tranche 2 (from 3 December 2018)
 - emergency lighting
 - fire monitoring systems
 - fire protection systems
 - gutter cleaning
- Tranche 3 (from 4 February 2019)
 - roof safety

3.13 In a long standing relationship before the Service Level Agreement was in place, various services were undertaken by the ACT Property Group on behalf of the Directorate. For example, tree management and maintenance had been provided by the ACT Property Group since 2014, although documentation could not be provided regarding these arrangements between 2014 and the current Service Level Agreement. Consultation between the Education Directorate and the ACT Property Group, for the delivery of tree management and maintenance during this period was described as informal.

Service levels and activities

3.14 The Service Level Agreement establishes:

- fees payable for the services to be provided – fees are charged by the ACT Property Group to the Directorate for the tranche of services provided across the schools. Fees are not charged on a school-by-school basis;
- minimum standards and service levels – standards and service levels are determined with reference to the relevant requirements of Australian Standards;

- schedules for works to be undertaken – depending on standards and service level requirements, works may be undertaken at different intervals, e.g. quarterly, half-yearly or annually; and
 - thresholds for reactive maintenance works – this allows for the contracted service provider undertaking inspections to undertake reactive maintenance works identified during scheduled inspections up to a specified threshold.
- 3.15 The ACT Property Group charges the Directorate a twelve percent management fee on top of actual costs incurred in the service delivery.
- 3.16 The Service Level Agreement is described as an ongoing agreement with a ‘[twelve] month annual budget review’, unless it is terminated by written agreement by both parties. The Service Level Agreement provides for an annual review to be conducted every year from 1 April and that ‘the delivery of work schedules will be reviewed effective from [1 April] in accordance with the method of review noted within the SLA agreed in writing by the parties’.
- 3.17 The Service Level Agreement described services to be delivered to 30 June 2019, including a schedule of activities across 2018-19 and payments to be made each month for the services. In July 2019 the Service Level Agreement was updated to reflect activities and payments for 2019-20.
- 3.18 In its response to the final proposed report, the Chief Minister, Treasury and Economic Development Directorate noted:
- For the 2018/19 period prior to the signing of the Service Level Agreement (SLA) in June 2019, planned maintenance works for the [Education Directorate] were raised with [ACT Property Group] prior to the commencement of the financial year requesting that [ACT Property Group] assist in facilitating works. No formal agreement was requested by [Education Directorate] and individual work orders were raised as works were confirmed by [Education Directorate]. As part of this process all individual work orders raised in the 2018/19 period were assessed as per [ACT Property Group] processes, including review of scope, costs and delivery to ensure value for money for [Education Directorate] as the client. Further to this any additional repairs or maintenance issues that were noted as requiring attention following the outcome of planned works were required to be approved by the responsible officer within the [Education Directorate] prior to [ACT Property Group] undertaking any additional works.
- During 2018 [ACT Property Group] and [Education Directorate] initiated discussion to formalise arrangements for future years to provide an enhanced contract management approach to the services that were being provided. An [Service Level Agreement] between [Education Directorate] and [ACT Property Group] was signed in June 2019 and provides a scope and budget for [ACT Property Group] to manage ongoing maintenance to address regulatory and compliance needs ...’
- 3.19 The ACT Property Group provides ‘maintenance management services’ to the Education Directorate for school infrastructure-related repairs and maintenance for the *Annual Works Program* through a Service Level Agreement. The services provided by the ACT Property Group through the *Annual Works Program* comprise routine, compliance-based inspections and preventive maintenance related to legislative and health and safety compliance activities. The Service Level Agreement is described as an ongoing agreement with a ‘[twelve] month annual budget review’. It commenced on 2 July 2018, but was signed on

28 June 2019. The Service Level Agreement described services to be delivered to 30 June 2019, including a schedule of activities across 2018-19 and payments to be made each month for the services, and in July 2019 a schedule of activities for 2019-20 and associated payments for these services were agreed by the parties.

Types of works to be undertaken

3.20 The Service Level Agreement, and supporting budgeting and reporting, envisages services to be provided in three key forms:

- routine inspection and maintenance activities (Work Plan);
- immediate small-scale repairs and maintenance works that can be undertaken as part of the routine inspection and maintenance activities (Work Plan Plus); and
- reactive repairs and maintenance works in response to an issue or problem that has been identified as part of routine inspection and maintenance activities (Reactive Maintenance).

3.21 The ACT Property Group utilises its panel contractors to provide the works identified in the Service Level Agreement.

Routine inspection and maintenance activities

3.22 The Service Level Agreement provides for routine inspection and maintenance activities to be undertaken for the different service activities across all ACT public schools. Routine inspection and maintenance activities are scheduled and timetabled with reference to relevant requirements of Australian Standards.

Work Plan Plus and Reactive Maintenance

3.23 The Service Level Agreement allows for the identification and immediate conduct of certain repairs and maintenance activities by contracted service providers when identified as part of routine inspections. These activities are referred to as Work Plan Plus activities. The Work Plan Plus activities that are allowed for are:

- automatic doors;
- playgrounds;
- trees;
- gutter cleaning;
- thermostatic mixing valves; and
- backflow prevention devices.

3.24 Immediate works for automatic doors are allowed where the value of the work to be undertaken on each door is less than \$250 under Work Plan Plus. For works to be undertaken where the value is greater than \$250 the service provider is required to submit

a quote for approval as reactive maintenance. Additional works for playgrounds is the responsibility of the schools to undertake. However, where the additional work has not been undertaken by the school and identified on consecutive visits, works can be undertaken on the site up to \$250 (Work Plan Plus). A quote is required for works in excess of this amount (Reactive Maintenance).

- 3.25 For additional works associated with trees, works that are identified while a tree inspector or arborist is on-site are allowed when the value of the works is less than \$2 000 and where the need is identified as urgent. Urgent is defined as ‘High risk rehabilitation work/s that, if not undertaken, may cause injury to people or damage to property/ immediate attention required’.
- 3.26 Contracted service providers can seek approval from the ACT Property Group while still on site for additional works associated with gutters, thermostatic mixing valves and backflow prevention devices where the value of the work to be undertaken is less than \$2 000 (Work Plan Plus).
- 3.27 For all other services provided through the Service Level Agreement the service provider is required to submit a quote for approval to the ACT Property Group (Reactive Maintenance).

Managing and monitoring ACT Property Group services

- 3.28 Services and activities provided by the ACT Property Group through the Service Level Agreement are reported on a monthly basis to the Education Directorate. The monthly reports provide:
- an overview of the total cost of works to the ACT Property Group and the corresponding total invoice value to the Education Directorate;
 - an overview of the total cost of Work Plan Plus and Reactive Maintenance works against the budget for these works; and
 - a detailed breakdown of costs incurred for each service activity.
- 3.29 In addition to the monthly reporting on services, since November 2018 the ACT Property Group has met with the Infrastructure and Capital Works Branch on a regular basis. The meetings provide an opportunity to report and track progress on service activities and expenditure and raise issues with respect to service delivery issues. A meeting occurred in November 2018, and then monthly meetings have occurred since February 2019.

Services provided through Service Level Agreement

- 3.30 Table 3-1 shows the budget and actual expenditure on repairs and maintenance services provided by the ACT Property Group under the Service Level Agreement with the Education Directorate.

Table 3-1 Budget and actual expenditure on repairs and maintenance services provided by ACT Property Group through the Service Level Agreement (2018-19)

	Budget (\$)	Actual (\$)
Work Plan (routine inspection and maintenance)	2 330 779	2 114 528
Work Plan Plus (immediate, small-scale, no quote required)	-	35 920
Reactive (quote required)	-	2 211 128
Work Plan Plus and Reactive	1 332 319	2 247 048
Total Cost of Works	3 663 098	4 361 576
ACT Property Group fee (12 percent)		523 389
Actual costs charged to Education Directorate		4 884 965

Source: ACT Audit Office, based on information from ACT Property Group.

3.31 A review of budget and actual expenditure associated with 2018-19 Annual Work Program services provided by the ACT Property Group to the Education Directorate through the Service Level Agreement shows:

- the actual cost associated with the delivery of Work Plan activities (routine inspection and maintenance activities) for 2018-19 was \$2 114 528 against a budget of \$2 330 779. This represents a saving of \$242 201 and reflects that there were no services (and associated charges) for July 2018 (the first month of operation of the Service Level Agreement). A 12 percent management fee was also charged in addition to this amount; and
- the actual cost associated with the delivery of Work Plan Plus and Reactive activities for 2018-19 was \$2 247 048 against a budget of \$1 332 319. This is an increase of \$914 729 (69 percent) over the budgeted amount.⁹ A 12 percent management fee was also charged in addition to this amount.

Efficiency and effectiveness of Service Level Agreement

3.32 The Directorate advised that the *Annual Works Program* comprises routine, compliance-based inspections and preventive maintenance that is necessarily focused on legislative and health and safety compliance activities.

3.33 Prior to entering into the Service Level Agreement with the ACT Property Group, no documentation was prepared by the Directorate justifying the arrangement including:

- the expected benefits to be derived from the ACT Property Group's delivery of the services; and
- the risks and costs of entering into such an arrangement.

⁹ Additional funds of \$1.3 million were provided in 2018/19 to complete Roof Safety, Fire Protection and Emergency Lighting repairs

- 3.34 Furthermore, poor documentation and record-keeping associated with the delivery of repairs and maintenance services means that there was (and is) no baseline against which the efficiency and effectiveness of the ACT Property Group's delivery of the services can be compared and evaluated against.
- 3.35 Both the Education Directorate and ACT Property Group have identified that there are expected benefits from the Service Level Agreement arrangements including efficiencies, as well as better school infrastructure management outcomes, derived from ACT Property Group's procurement and contracting service providers for bulk repairs and maintenance activities:
- efficiencies from economies of scale – the ACT Property Group has the opportunity to achieve lower costs through procurement activities predicated on known and certain types and volumes of work; and
 - better school infrastructure management outcomes – the ACT Property Group has the opportunity to achieve better infrastructure outcomes, including consistency in service provision, through direct and ongoing contract management of service providers.
- 3.36 In relation to efficiencies from economies of scale the Education Directorate also noted it expected a reduction in its administrative workload, specifically with respect to the administrative effort associated with the processing of invoices. The reduction in administrative workload was expected to allow the Infrastructure and Capital Works Branch to focus on other activities.
- 3.37 While the Service Level Agreement provides some certainty for budgeting purposes for routine repairs and maintenance activities, in the first year of operation of the Service Level Agreement (2018-19) the actual costs associated with the delivery of Work Plan Plus and Reactive activities, i.e. reactive maintenance needs identified by contracted service providers, was 69 percent over what was budgeted for. The lack of baseline data at the outset of the arrangement (as well as the lack of up to date building condition assessment data) means that there is little opportunity for the Directorate to evaluate the merits of this additional expenditure.
- 3.38 In its response to the final proposed report, the Chief Minister, Treasury and Economic Development Directorate advised:
- The implementation of the [Service Level Agreement] provides the basis for a clear scope of works to be undertaken by [ACT Property Group] while also allowing for the development of a comprehensive planned program of works for the [Education Directorate].
- The formalised approach within the [Service Level Agreement] will continue to ensure that the [Education Directorate] receives value for money, sound project management, ongoing and projected budget reporting, compliance with relevant legislative requirement and standards, high level technical expertise relevant to the scope of each project and a dedicated single point of contact within [ACT Property Group].
- ...

In the future it would be hoped that the continued agreement will benefit [Education Directorate] in compiling an assets management list and provide information on asset age and frequency of repairs to allow for improved asset replacement planning the future.

3.39 In its response to the final proposed report, the Chief Minister, Treasury and Economic Development Directorate also advised:

The 12% management fee covers the management of panel contractors ensuring value for money and that compliance requirements are met in an everchanging ACT Government environment. It expands to cover project management services including:

- Project management (usually an additional cost)
- Arranging a schedule of works
- Ongoing and projected budget reporting
- Inspection of works to ensure compliance with the relevant legislative requirements and standards
- Dedicated single point of contact
- Technical expertise relevant to the project scope
- Provision of information to support informed decision making on asset maintenance and recommended repairs.

3.40 In 2018-19 the ACT Property Group charged the Directorate \$4.9 million for repairs and maintenance services provided through the Service Level Agreement. (This figure includes a twelve percent management fee charged by the ACT Property Group for the services. The figure does not include services provided by the ACT Property Group through other programs and activities). The cost of reactive maintenance services provided through the Service Level Agreement was \$2.25 million against a budget of \$1.33 million, an increase of \$0.91 million (69 percent). The twelve percent management fee was also charged in addition to this amount. Prior to entering into the Service Level Agreement with the ACT Property Group, no documentation was prepared by the Directorate justifying the arrangement including the expected benefits and the risks and costs of entering into such an arrangement. By managing these activities centrally through the ACT Property Group, the Directorate advised that it sought to achieve efficiencies from economies of scale and better school infrastructure management outcomes as well as a reduction in administrative effort on the part of the Infrastructure and Capital Works Branch. The lack of baseline data on the cost of these activities, and the effectiveness of their management prior to being delivered by the ACT Property Group, as well as the fact that the ACT Property Group has only been delivering these services for a comparatively short time (less than six months in some instances), means the efficiency and effectiveness of the arrangement cannot be determined.

RECOMMENDATION 6 SERVICE LEVEL AGREEMENT

The Education Directorate should develop baseline data for the cost of activities undertaken under the Service Level Agreement. Expectations should be developed for the benefits that the Service Level Agreement aims to provide and the expectations should be periodically reviewed to inform the performance of the Service Level Agreement.

Specific Works Program

3.41 The *Specific Works Program* is managed by the School Infrastructure Management Team within the Infrastructure and Capital Works Branch. There is no specific description of the *Specific Works Program*, its purpose, intention or scope although it is acknowledged that it covers 'major repair works and planned maintenance programs that are not school responsibilities under the Schools Operational Allocation (SOA) guidelines'.

Funding processes

3.42 Funding through the *Specific Works Program* is allocated on an annual basis through a competitive process between schools. In practice, the Infrastructure and Capital Works Branch issues an annual invitation in June to ACT public schools to nominate projects or activities for which they are seeking funding through the *Specific Works Program*. The June 2019 annual invitation sought ACT public schools to nominate priorities (activities), including a brief description of each priority as well as an 'indicative cost' for each priority.

3.43 A letter sent to ACT public schools on 7 June 2019 for repairs and maintenance works to be conducted in 2019-20 stated:

The focus areas for the 2019-20 R&M specific works program are as follows:

- Main switchboard upgrades/electrical safety
- Structural repairs
- Sewer/storm water infrastructure
- Roof repairs
- External painting
- Other school WHS priorities

3.44 These were also the 'focus areas' for 2018-19 and 2017-18. The letter sent to ACT public schools on 21 March 2016 for repairs and maintenance works to be conducted in 2016-17 requests did not identify any focus areas.

3.45 In practice, most (but not all) ACT public schools typically respond to the annual request for applications with a list of requests and associated estimates. The School Infrastructure Management Team within the Infrastructure and Capital Works Branch then assesses these applications and makes offers for funding to the schools.

Program decision-making

- 3.46 The Audit Office reviewed:
- ACT public schools' requests for funding through the *Specific Works Program* for 2016-17 and 2017-18; and
 - the Infrastructure and Capital Works Branch's assessment of schools' requests for funding for 2016-17, 2017-18 and 2018-19.
- 3.47 Poor documentation and record-keeping for the 2018-19 *Specific Works Program* means that the Infrastructure and Capital Works Branch does not have a consolidated list of funding requests from ACT public schools for 2018-19.
- 3.48 Between 2016-17 and 2017-18 the total number of schools that responded to the request for funding was as follows:
- 2016-17 – 79 schools from a total of 85; and
 - 2017-18 – 72 schools from a total of 85.
- 3.49 Data on the total number of schools that responded to the funding request for 2018-19 was not available.
- 3.50 Table 3-2 shows the total value of funds requested by ACT public schools through the *Specific Works Program* between 2016-17 and 2018-19, the value of approved funds and actual expenditure under the program.

Table 3-2 Funds requested and approved through the *Specific Works Program* for financial years 2016-17 to 2018-19 (\$)

	Budget	Requested funds	Approved funds	Actual expenditure
2016-17	3 800 000	14 276 547	3 764 195	3 858 297
2017-18	3 400 000	16 189 371	3 377 000	3 796 642
2018-19	2 500 000	Not available	2 693 068	2 640 664

Source: ACT Audit Office, based on Education Directorate data

Note: The actual expenditure for 2018-19 shows committed expenditure of \$51,492 that was not yet invoiced at the time of the audit.

- 3.51 A review of the operation of the *Specific Works Program* for the three years to 2018-19 shows ACT public schools typically make requests for funding significant in excess of the budgeted program amount, e.g. in 2016-17 \$14 276 547 was requested by schools against a program budget of \$3 800 000 and in 2017-18 \$16 189 371 was requested by schools against a program budget of \$3 400 000.

School funding requests

- 3.52 A review of funding requests for the *Specific Works Program* for 2016-17 and 2017-18 shows there is considerable variation in the dollar value of works requested by the ACT public

schools. For example, a college requested \$7.4 million in funding for various projects in 2016-17, representing 52 percent of the total value of requests from all schools and almost two times the total approved funds for 2016-17. By way of comparison another college requested \$10,000 in funding for projects. Other ACT public schools made no requests for funding at all.

- 3.53 A review of funding requests for the *Specific Works Program* for 2016-17 and 2017-18 shows the quality and comprehensiveness of the information received from schools as part of the application process varied significantly. Some schools provided cost estimates based on quotations received from sub-contractors, while other schools provided a list of line items with no estimates of cost. Some applications for funding made reference to building condition assessment reports as a means to justify the application request.
- 3.54 Additionally, some schools requested multiple projects through the *Specific Works Program* that are the responsibility of the schools under Module 7 of the *School Management Manual*. For example, a primary school requested funding for five projects as part of the 2016-17 *Specific Works Program*, of which three were the responsibility of the school to fund, rather than the *Specific Works Program*. Another primary school requested funding for 13 projects, six of which were the responsibility of the school to fund.
- 3.55 Examples of projects that schools requested funding from the *Specific Works Program*, which were the responsibility of the school to fund include:
- installing non-slip surfaces on a deck and stairs of a transportable building, estimated cost \$2 000;
 - installing non-slip covering on a vinyl floor, estimated cost \$2 000;
 - installing exit buttons on automatic doors, estimated cost \$2 000;
 - replacement and repairs of windows and doors, estimated cost \$6 000;
 - replacement of external glass doors, estimated cost \$12 000;
 - painting of plaster ceilings, estimated cost \$10 000;
 - replacement of domestic hot water units, estimated cost \$8 000;
 - replacement of tapware, estimated cost \$35 000; and
 - updating an electrical legend for switchboards, estimated cost \$16 000.

Infrastructure and Capital Works Branch decision-making

- 3.56 No guidelines have been developed for the *Specific Works Program* in order to assist Infrastructure and Capital Works Branch decision-making for the program, including:
- how to assess the merits of the different applications that have been received; and
 - how to assess different applications from different schools against each other.

- 3.57 In the absence of guidelines or funding criteria the Infrastructure and Capital Works Branch exercises considerable discretion in its decision-making under the program.
- 3.58 For 2016-17 and 2017-18 a brief rationale was prepared in relation to ACT public schools' requests for funding. In many instances the brief rationale that was prepared did not support or justify decision-making, nor did it justify the merits of funding one school's application over another. For 2018-19 poor documentation and record-keeping meant that there was no rationale provided for program funding decisions.
- 3.59 A review of funding decisions for the *Specific Works Program* for 2016-17 and 2017-18 shows the Infrastructure and Capital Works Branch has also approved funding under the program that is the responsibility of ACT public schools under Module 7 of the *School Management Module*. For example, in 2018-19 the Branch agreed to fund:
- \$16 000 (from a total of \$18 911) for maintenance of the hall floor at an early childhood school; and
 - \$19 800 (from a total of \$39 600) for internal painting of classrooms at a primary school.
- 3.60 The School Infrastructure Management Team within the Infrastructure and Capital Works Branch manages the *Specific Works Program* for 'major repair works and planned maintenance programs that are not school responsibilities under the Schools Operational Allocation (SOA) guidelines'. There is no specific description of the *Specific Works Program*, its purpose, intention or scope, and no guidelines have been developed to assist the Infrastructure and Capital Works Branch decision-making for the program. In 2016-17 a total of \$3.9 million was spent under the program, but this has since declined to \$2.6 million in 2018-19. ACT public schools typically request funding for activities well in excess of the program budget, with \$14.3 million sought in 2016-17 and \$16.2 million sought in 2017-18 (poor documentation and record-keeping means there is no consolidated list of funding requests from ACT public schools for 2018-19). In the absence of guidelines or funding criteria the Infrastructure and Capital Works Branch exercises considerable discretion in its decision-making under the program, but for the three years to 2018-19 there has been insufficient documentation of funding decisions. Poor documentation and record-keeping associated with the program, including a lack of information on the purpose, intention or scope, as well as insufficient documentation of funding criteria means that the effectiveness of the *Specific Works Program* in contributing to the management of school infrastructure assets cannot be determined.

RECOMMENDATION 7 SPECIFIC WORKS PROGRAM

The Education Directorate should state the purpose and scope of the Specific Works Program and prepare guidelines and funding criteria. Record keeping should be improved with all funding decisions comprehensively recorded.

Schools

3.61 Module 7 of the *School Management Manual* acknowledges the shared responsibility between schools and the Education Support Office (as represented by the Infrastructure and Capital Works Branch):

The ACT Education Directorate manages a significant portfolio of school-based facilities and assets, with the responsibility for safety, optimal usage and effective upkeep shared between schools and Education Support Office.

3.62 Module 7 of the *School Management Manual* provides further practical guidance on administrative roles and responsibilities for school infrastructure asset management. Appendix A provides information on how responsibility for school infrastructure asset management is allocated between the Infrastructure and Capital Works Branch and the schools according to the *School Management Manual*.

Repairs and maintenance works undertaken

3.63 As discussed in paragraphs 2.17 to 2.20, ACT public schools are allocated funding through the School Operational Allocation for repairs and maintenance activities that are within their responsibility by virtue of Module 2 of the *School Management Manual*.

3.64 There is no consolidated reporting across the ACT Education Directorate on schools' actual repairs and maintenance activities or expenditure on repairs and maintenance activities. Data on schools' repairs and maintenance expenditure can be sourced from:

- the MAZE management information system; and
- schools' annual Board reporting to the school community.

3.65 Information from each of the data sources is not always reconcilable.

Schools' reported repairs and maintenance expenditure

3.66 Table 3-3 shows the maintenance component of the School Operational Allocation for all ACT public schools between 2016 and 2018 and schools' reported expenditure on repairs and maintenance as recorded in the MAZE management information system.

Table 3-3 ACT public schools' funding allocation and expenditure on repairs and maintenance (2016 to 2018) (\$)

Year	Total School Operational Allocation	Maintenance component of School Operational Allocation	Recorded maintenance expenditure
2016	-	-	8 012 414
2017	37 013 289	5 198 530	6 864 036
2018	38 810 362	5 360 858	8 214 615

Source: ACT Audit Office, based on Education Directorate information

Note: The School Operational Allocation for 2016 was calculated with a different methodology and is not comparable with the figures for 2017 onwards. The Education Directorate advised that in 2016 schools were allocated approximately \$5.5 million in repairs and maintenance funding.

3.67 A review of ACT public schools' allocation of repairs and maintenance funding through the School Operational Allocation and expenditure on repairs and maintenance as recorded in the Directorate's MAZE management information system shows: for 2017 schools were allocated a total of \$5.2 million in funding, but reported spending a total of \$6.9 million; and for 2018 schools were allocated a total of \$5.4 million in funding, but reported spending a total of \$8.2 million. This suggests that ACT public schools are using other components of the School Operational Allocation to pay for repairs and maintenance activities or are funding repairs and maintenance activities through other sources of revenue.

3.68 Table 3-4 shows the maintenance component of the School Operational Allocation for the six schools selected as part of the audit between 2016 and 2018 and the schools' reported expenditure on repairs and maintenance, as recorded in the MAZE management information system and reported to the school community through the school Board.

Table 3-4 Six schools' funding allocation and expenditure on repairs and maintenance (2016 to 2018)

		Calwell High	Kingsford Smith School	Charles Weston School	Telopea Park School	Gungahlin College	Malkara School
2016	Maintenance component of SOA	-	-	-	-	-	-
	MAZE recorded maintenance expenditure	180 883	132 674	1 840	119 723	85 385	59 161
	Board reported maintenance expenditure	180 883	207 982	-	159 920	207 719	102 797
2017	Maintenance component of SOA	49 107	76 815	42 929	103 615	67 161	33 841
	MAZE recorded maintenance expenditure	86 993	129 320	3 578	136 480	102 164	52 949
	Board reported maintenance expenditure	86 992	198 959	5 626	198 191	193 057	66 164
2018	Maintenance component of SOA	50 608	78 450	46 257	105 612	68 302	34 674
	MAZE recorded maintenance expenditure	94 868	142 384	14 703	143 063	178 123	51 717
	Board reported maintenance expenditure	94 868	222 176	49 142	164 250	388 649	75 854

Source: ACT Audit Office, based on Education Directorate information.

Note: The maintenance component of SOA for 2016 was not available.

3.69 Whilst it is apparent that schools have regularly exceeded the budget allocated for repairs and maintenance, when school budgets are exceeded, schools prioritise works so that only essential and/or emergency works are undertaken, and this is often at the cost of planned maintenance.

3.70 A review of the six schools selected as part of the audit and their repairs and maintenance expenditure shows:

- for 2017 and 2018 five of the six schools recorded repairs and maintenance expenditure in the MAZE management information system in excess of the notional allocation of funding through the School Operational Allocation. The schools reported

expenditure of between 32 to 161 percent more than was allocated (\$32 865 and \$109 821 respectively); and

- for 2017 and 2018 five of the six schools reported repairs and maintenance expenditure to the school community through the school Board in excess of the amount reported in the MAZE management information system. It is possible that school board reports include expenditure for other minor works, which are not categorised as repairs and maintenance expenditure in the MAZE management information system.

RECOMMENDATION 8 SCHOOL EXPENDITURE ON REPAIRS AND MAINTENANCE

The Education Directorate should review:

- a) the methods used to record repair and maintenance activities, and the expenditure on repairs and maintenance, with a view to achieving consistent and consolidated reporting; and
- b) the operation of the School Operational Allocation, to determine why schools exceeded their maintenance component allocations in 2017 and 2018.

Repairs and maintenance decision-making

3.71 By virtue of section 21 of the *Education Act 2004*, ACT public schools determine what repairs and maintenance activities to undertake. As discussed in paragraphs 2.73 to 2.75, for the schools selected for audit:

- two of the schools documented scheduled maintenance activities in a maintenance plan;
- three of the schools planned maintenance activities but did not have a documented plan; and
- one school's maintenance planning was undertaken as part of an Infrastructure Maintenance Services Agreement with the Joss Group, who was contracted to design, construct and maintain the school.

3.72 The schools selected as part of the audit identified that repairs and maintenance activities were identified and determined through:

- consultation with staff;
- undertaking visual inspections of school infrastructure;
- responding to emerging issues; and
- using their corporate knowledge.

3.73 Table 3-5 shows ACT public schools' considerations in identifying repairs and maintenance needs and activities.

Table 3-5 ACT public schools' considerations for repairs and maintenance

School	How school determined what repairs and maintenance works to undertake
Telopea Park School	<ul style="list-style-type: none"> • Consultation—discussions between executive team, business manager, building service officers and faculty teachers. • Response to issues—requests and issues raised by staff and work health and safety issues • Visual inspections of the school. • Corporate knowledge—business manager's experience of repairs and maintenance undertaken previously. • Condition information—school maintained a documented Master Maintenance Plan that listed when each room within school had last been painted and re-carpeted.
Calwell High School	<ul style="list-style-type: none"> • Consultation—discussions between principal, business manager, building support officer and staff. • Response to issues—requests and issues raised through school's log-a-job system and work health and safety issues. • Planning—plan for, and prioritise repair and maintenance works that support improving educational outcomes for students. • Corporate knowledge—business manager's experience of repairs and maintenance undertaken previously
Malkara School	<ul style="list-style-type: none"> • Consultation—discussions between principal, business manager and business support officer. • Response to issues—issues raised during staff meetings and executive meetings and work health and safety issues. • Planning—school documented maintenance activities to be undertaken over eight years.
Kingsford Smith	<ul style="list-style-type: none"> • Consultation—discussions between principal, executive staff, business manager and building support officers. • Corporate knowledge—business manager's experience of repairs and maintenance undertaken previously year. • Response to issues—address work health and safety issues. • Planning—school documented planned maintenance activities for the year.
Gungahlin College	<ul style="list-style-type: none"> • Consultation—discussions between principal, business manager, assistant facility manager, faculty directors, executive team and college board. • Planning—college undertakes scheduled maintenance activities each year.¹⁰
Charles Weston	<ul style="list-style-type: none"> • Planning—Contract with Joss Group for maintenance services over five years.

Source: ACT Audit Office

¹⁰ For example: solar panel and solar panel inverter inspections, servicing of refrigerators, freezers, grease traps and Billi instant hot water units, and testing and tagging of electrical applications.

- 3.74 A review of the works chosen to be undertaken by the schools shows that whilst schools are undertaking repairs and maintenance works, the majority of the works are reactive maintenance, and the minority of the works are planned maintenance or informed by building condition assessments.
- 3.75 When works are planned, plans only contain general information of the works, for example front office painting, conference room furniture, while other plans might list only the types of work, for example 'internal painting'. Generally, the plans do not consider the expected cost involved in undertaking works, or prioritisation of works to fit within the available budget.
- 3.76 None of the maintenance plans reviewed considered the safety benefit of such works, or gave any priority to works that would improve safety at a school. Consideration was also not given to any compliance or regulatory aspect of any works on maintenance plans.
- 3.77 Schools are undertaking repairs and maintenance activities, though evidence shows that the majority of these works are reactive maintenance, rather than planned maintenance. Comprehensive asset management processes, including building condition assessments and annual maintenance planning would assist with planned maintenance activities that are expected to reduce the amount of more expensive reactive maintenance.

APPENDIX A: RESPONSIBILITIES FOR REPAIRING AND MAINTAINING SCHOOLS

School Management Manual – school asset management responsibilities

Asset type	School responsibilities	Education Support Office responsibilities
Grounds	<p>General grounds maintenance including:</p> <ul style="list-style-type: none"> • repair of pot holes and soft fall surfaces • maintenance of car parks and sports field infrastructure • removal of trip and slip hazards • gardening, including maintaining real and synthetic turf • maintaining irrigation systems, external furniture and play equipment 	<ul style="list-style-type: none"> • Annual tree audit and tree maintenance work • Annual ember zone audit and clean • Impact testing of soft fall surfaces • Bi-monthly operational audits of play and climbing equipment • Annual comprehensive audit of play and climbing equipment
Buildings	<ul style="list-style-type: none"> • Repair of damaged doors, windows and roof leaks • Removal of graffiti • Painting of internal walls • Maintenance and replacement of floor coverings • Cleaning of gutters, downpipes and stormwater pits as required • Removal of known asbestos containing material (ACM) if disturbed during school-organised renovation • Pest control 	<ul style="list-style-type: none"> • Painting of external walls • Engagement of an architect or interior designer to prepare a colour palette • Biannual cleaning of school gutters, downpipes and stormwater pits • Preparation of an Asbestos Register and Management Plan • Removal of unknown Asbestos Contaminated Material (ACM) and known ACM if exposed by vandalism • Conduct of a Building Condition Assessment to be undertaken every three years
Security system	<ul style="list-style-type: none"> • Maintenance of window and door locks • Re-key of school locks if external keys are lost • Repair of fire detection and protection systems if vandalised • Modification of fire protection and emergency lighting systems as required in response to a school-organised renovation 	<ul style="list-style-type: none"> • Installation of external security fence • Maintenance and upgrade of electronic security systems • Testing and maintenance of fire detection and protection systems and emergency lighting system
Electrical infrastructure	<ul style="list-style-type: none"> • Testing and tagging of all electrical equipment • Replacement of electrical leads and equipment as required 	<ul style="list-style-type: none"> • Thermal imaging of electrical switchboards every three years • Repair, upgrade and replacement of electrical switchboards

Asset type	School responsibilities	Education Support Office responsibilities
	<ul style="list-style-type: none"> • Testing of Residual Current Devices (RCDs) and upgrade as required • Maintenance of rooftop solar panels • Maintenance of light fittings and replacement of light bulbs 	<ul style="list-style-type: none"> • Testing of Power Factor Correction (PFC) devices every three years • Repair, upgrade and replacement of PFC devices
Plumbing and gas infrastructure	<ul style="list-style-type: none"> • Repair and maintenance of taps, toilets, drinking fountains, hot water units and boiling water units • Clearing of blocked sewerage pipes caused by students or staff • Maintenance of water reticulation system, gas reticulation system and rain water tank 	<ul style="list-style-type: none"> • Annual inspection, repair and maintenance of thermostatic mixing and backflow prevention valves • Clearing of blocked sewerage pipes caused by tree roots, pipe collapse etc
Heating, ventilation and air conditioning (HVAC) system		<ul style="list-style-type: none"> • Repair and maintenance of HVAC system
Roof access safety system	<ul style="list-style-type: none"> • Purchase and maintenance of an extension ladder • Maintenance of safety harness and replacement if lost or not maintained 	<ul style="list-style-type: none"> • Installation, maintenance and upgrade of roof access safety system • Annual inspection and re-certification of roof access safety system
Hydrotherapy pool	Operation of pool, maintenance of water quality and water filtration system	<ul style="list-style-type: none"> • Repair and maintenance of pool's HVAC system
Lifts and automatic doors	Repair of lift or automatic door if damage caused by students or staff	<ul style="list-style-type: none"> • Installation and maintenance of all lifts and automatic doors

Source: ACT Audit Office analysis of module seven of School Management Manual

Audit reports

Reports Published in 2018-19	
Report No. 10 – 2019	2018-19 Financial Audits – Financial Results and Audit Findings
Report No. 09 – 2019	2018-19 Financial Audits – Overview
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Report No. 05 – 2019	Management of the System-Wide Data Review implementation program
Report No. 04 – 2019	2017-18 Financial Audits Computer Information Systems
Report No. 03 – 2019	Access Canberra Business Planning and Monitoring
Report No. 02 – 2019	Recognition and implementation of obligations under the <i>Human Rights Act 2004</i>
Report No. 01 – 2019	Total Facilities Management Procurement
Report No. 12 – 2018	2017-18 Financial Audits – Financial Results and Audit Findings
Report No. 11 – 2018	2017-18 Financial Audits – Overview
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