Infrastructure Capability Assessment

Education and Training

Infrastructure Victoria
Infrastructure Capability Assessment

Education and training

What this assessment is about

This infrastructure capability assessment is one of a series of supporting documents that Infrastructure Victoria (IV) has used to assist them in developing their paper - Laying the Foundations, Setting objectives and identifying needs for Victoria's 30-year infrastructure strategy.

This assessment sets out to:

• Identify the major assets in the sector and provide the wider context in which assets operate, including the interconnections between assets, identification of key stakeholders and current industry trends in the sector

• Provide a base of quantitative data as a foundation from which IV can start developing the strategy in relation to asset value, historical and forecast investment, infrastructure performance and current/future capacity in each sector

• Identify the future challenges and opportunities associated with the sector, specifically related to how existing infrastructure can be used to accommodate future demand.

This assessment represents an initial view on infrastructure in the sector and has been prepared based on publicly available information and in consultation with the stakeholders with whom we have engaged to date. Data collection has been based on consolidation of existing and available information as opposed to undertaking new primary research.

This assessment is intended to set the scene for broader discussion and is complemented by a range of other technical documents available at www.infrastructurevictoria.com.au. It is IV’s intention that this work serves as one of the platforms for further engagement and refinement of Victoria’s infrastructure needs as IV progresses its 30 year infrastructure strategy development further.

What this assessment is not about

This assessment did not seek to and does not identify solutions. It does not propose options for meeting Victoria’s infrastructure needs or make recommendations to Infrastructure Victoria.

In preparing the assessment we acknowledge and understand that there is likely to be additional information available that could help influence future thinking. The findings and analysis through this assessment are an initial starting point and may be subject to change as alternate views and information is identified.
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**Key Findings**

1. Significant under investment in maintenance, asset renewal and capital investment across the sector
2. Poor asset investment decisions have lead to a disparity in supply versus demand in areas across the state, school infrastructure in particular
3. Government plays an integral role in the government school sub-sector with the provision of ongoing maintenance and capital investment to meet significant demand. In addition, they provide contributory funding to Non-Government Schools
4. Privately operated assets present challenges for state-wide investment decision making.

**Infrastructure use**

Demand for Education Services are growing:

- Population growth to 9.6 million by 2046, of which approximately 2.2 million will be under 19 years old, will place the sector under significant future stress
- Lifelong learning and transitioning to a knowledge based economy are expected to increase demand on post school education providers with resultant infrastructure pressures
- Government schools and TAFEs are currently underutilised and present an opportunity.

**Operational criticality & resilience**

The Education and Training sector is a broad network, servicing a number of Victorian communities and is resilient to risk of failure

Whilst significant issues exist for localised stakeholders in the event of a failure (asset closure such as a school, ECE or even a University) the network is able to ‘flex’ to accommodate reasonable major demand changes.

**Assets, expenditure & governance**

Significant regulation for government and non-government providers. Government contributions account for the majority of total funding across the sector

- Sector currently accommodates over 1.7 million students
- 2015-2016 State Budget allocated additional funding of approximately $2.9 billion across the sector. This includes slightly over $1 billion in infrastructure investment across the state
- Private assets are independently managed.

**Infrastrestructure condition**

Across the Education and Training sector 75% of the assets are in reasonable condition. However, this is based on data in excess of 5 years and it is assumed significant investment is required to bring elements of the portfolio up to appropriate standards.

- Asset management plans are utilised but not standardised or prevalent across the entire sector
- Victoria is competitive across the sector with other states
- Physical Condition and fit for purpose of the sector overall is satisfactory in the short-term.

**Infrastructure service performance**

Government regulation of the sector is focused on registration and quality of service delivered, infrastructure is typically not assessed.

Whilst the education and training sector is a heavy user of ICT systems, systems leveraged are not mission critical for the operation of the sector. ICT is fragmented with little to no interaction between the public and private sector.

Early Childhood Education is perceived as being short on supply and convenient access to quality services. The introduction of the National Quality Frameworks provided a framework for quality assessment on which Victoria receives the highest quality assessment ratings across Australia. There are increasing cost pressures on the ECE sector due to the introduction of stricter regulations.
## Future challenges and opportunities

The sector is challenged by long term underinvestment in maintenance and asset renewal. Regulation requirements and increasing quality and service expectations of consumers has created localised demand challenges for long term planning. This coupled with an ageing portfolio of assets, increases the levels of funding required to maintain and improve asset condition and functionality.

Generally the sector is expected to grow as the emphasis on education and training across all ages increases. Changing technology and flexible work practices creates opportunities for increased asset utilisation within and across the sub-sectors.

<table>
<thead>
<tr>
<th>Sub-Sector</th>
<th>Challenges</th>
<th>Opportunities</th>
</tr>
</thead>
</table>
| **Higher Education** | • Aging infrastructure, Victorian Universities range from 42 to a 163 years old, infrastructure is reaching the end of its serviceable life and requires renewal or replacement  
• Growing demand of both domestic and international students  
• Changing teaching pedagogy influenced by growth of technology  
• Managing demand and utilisation of assets  
• Regulation changes to funding models  
• Management of backlog maintenance | • Transition to knowledge based economy increasing demand for qualifications  
• Growing demand of both domestic and international students  
• Life long learning  
• Technological advances create opportunities to increase asset utilisation |
| **Vocational Education and Training (VET)** | **TAFE**  
• Regulation in a restrained and uncertain funding environment  
• Systemic underinvestment in maintenance  
• Market based funding  
• Adapting to industry qualification requirements | **TAFE**  
• Regulation in a restrained and uncertain funding environment  
• Systemic underinvestment in maintenance  
• Market based funding  
• Adapting to industry qualification requirements | • Current asset base is under utilised and can respond quickly to demand increases  
• Transition to knowledge based economy increasing demand for qualifications and retraining  
• Technology assisting in delivery of multiple courses resulting in increased asset utilisation |
| **RTOs** | • Quality and recognition of qualifications in industry  
• Meeting the demands of changing consumer requirements  
• VET funding for courses under review | **RTOs**  
• Quality and recognition of qualifications in industry  
• Meeting the demands of changing consumer requirements  
• VET funding for courses under review | • Transition to knowledge based economy increasing demand for qualifications and retraining  
• Technology assisting in delivery of multiple courses resulting in increased asset utilisation |
| **Non-Government** | • Information asymmetry with government demand and forecasting  
• Maintaining current levels of Commonwealth government funding | **Non-Government**  
• Information asymmetry with government demand and forecasting  
• Maintaining current levels of Commonwealth government funding | • Servicing demand in growth and established areas  
• Facilitate sharing of best practice asset management guidelines |
| **Government** | • Systemic underinvestment in maintenance  
• Intense localised demand in growth and established areas  
• Ongoing maintenance of underutilised assets  
• Capacity of existing permanent school infrastructure to meet demand  
• Value for money on maintenance funding | **Government**  
• Systemic underinvestment in maintenance  
• Intense localised demand in growth and established areas  
• Ongoing maintenance of underutilised assets  
• Capacity of existing permanent school infrastructure to meet demand  
• Value for money on maintenance funding | • Technological advances create opportunities to increase asset utilisation across a network of schools  
• Best practice asset management guidelines  
• Strategic approach to localised areas of under utilised assets  
• Geographically based maintenance and/or facilities management service contracts |
| **Early Childhood** | • Changing regulation that affects staffing and infrastructure requirements for service offerings  
• Responding to localised demand increases and flexible work practices | **Early Childhood**  
• Changing regulation that affects staffing and infrastructure requirements for service offerings  
• Responding to localised demand increases and flexible work practices | • Demand for services to compliment flexible work practices through co-location  
• Facilitate sharing of best practice asset management guidelines  
• Simplification of funding arrangements |
1.1 Introduction

Education and training are critical social and economic features of Victoria. The sector delivers services to both domestic and international students. The asset base has an estimated replacement value in excess of $35 billion. The ownership and funding structure is complex and heavily reliant upon government funding.

1.2 Sector Overview

The sector provides services from birth via Early Childhood Education, School Education and throughout adulthood via VET and Higher Education. These services form the Education sub-sectors and are defined by age and the level of qualification sought. The Australian government provides support to all sub-sectors through grants, tax concessions and subsidies.

The Victorian Government plays a role across all sub-sectors, ranging from ownership and management, planning and regulation, to capital funding grants. Government assets are owned and operated by the Department of Education and Training (DET) but a significant portion of education assets are privately managed and/or owned.

Privately owned assets contribute to every sub-sector and include:
- Early Childhood Education (ECE)
- Non-government schools
- Registered Training Providers (RTOs)
- TAFE
- Universities.

Note, information relating to the Non-Government Schools sub-sector is all publically sourced. No further information was provided by stakeholders.

1.3 Scope

This report is an assessment of the availability, condition and performance of infrastructure across the Education & Training sector in Victoria. The purpose of the assessment is to:
- Identify the major assets in the sector and provide the wider context in which assets operate, including the interconnections between assets, identification of key stakeholders and current industry trends in the sector
- Provide a base of independent, quantitative data as a foundation from which to start developing the strategy. This data will outline asset value, historical and forecast investment, infrastructure performance and current/future capacity in the sector
- Identify the future challenges and opportunities associated with the sector, specifically, how existing infrastructure can be used to accommodate future demand.

*Students attending this care may be older than 8*
Assets, expenditure and governance
1. Current major infrastructure assets

Over 2.1 million Victorians utilise the assets of over 9,500 education & training providers. The asset base is a mix of private and public ownership and management, with a replacement value of over $35 billion.

### Early Childhood (>400,000 children)

DET is accountable for planning, regulating and funding early childhood services.

DET partners with local government and community organisations to plan and provide early childhood services. Through service agreements, DET funds approximately 1,000 organisations, including Local Government Authorities (LGAs), community organisations and private entities.

In 2013-14 DET budgeted a total of $513 million for early childhood services.

### Schools (>915,000 students)

The asset ownership of the sub-sector can be categorised as government owned and non-government owned. Approximately 62 per cent of Victorian students attend a government primary or secondary school while Catholic and Independent schooling comprise 23 per cent and 15 per cent respectively.

DET is responsible for the Government schools asset portfolio. The portfolio includes more than 1,500 Government schools with approximately 34,000 buildings (27,000 core buildings) in metropolitan and regional Victoria. Government schools host more than 565,000 students and 41,400 teaching staff. The estimated replacement value of the Government schools portfolio is in excess of $13.5 billion. The total asset value, which includes land and buildings, was last assessed at $15.4 billion (DET Annual Report 2015).

Non-Government Schools are independently managed and are classified as either Catholic or Independent. The Catholic Education Commission of Victoria (CECV) and Independent Schools Victoria (ISV) are key industry bodies.

Eligible Non-Government Schools receive both Commonwealth and State grants and are reliant upon private funding (including fees) to operate and maintain assets.

### VET (> 443,000 students)

The Victorian Training Guarantee Program (VTG) is the vehicle through which registered education and training organisations are contracted to deliver government subsidised training services to eligible individuals.

The subsidy is paid to the training provider after the student enrols. There are currently over 450 training providers offering government-subsidised training places across Victoria.

VET funding contracts are between DET and registered training organisations (RTO), including individual TAFE institutes, for the delivery of government subsidised training. The contract and related VET funding guidelines mandate requirements that training providers must comply with to maintain compliance as a contracted provider in receipt of government subsidy. The contract and guidelines set standards of behaviour, as well as prescribing minimum requirements with regard to provider practice in the delivery of training services.

There are currently 432 organisations that have contracts to deliver training under the VTG. They consist of the following:

<table>
<thead>
<tr>
<th>Entity</th>
<th>Number of Contracted Providers (VTG)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAFE/Dual Sector Universities</td>
<td>16</td>
</tr>
<tr>
<td>Adult Community and Further Education (ACFE)</td>
<td>101</td>
</tr>
<tr>
<td>Private</td>
<td>315</td>
</tr>
<tr>
<td>Total</td>
<td>432</td>
</tr>
</tbody>
</table>

DET and the Minister for Training and Skills have responsibility for TAFE/Dual Sector Universities and ACFE assets, including, the provision of capital and maintenance funding, approving long-term leases (in excess of 21 years) and other commercial activity over $5 million (land sales and purchases).

### ACFE

Through the ACFE Board, the Victorian Government provides support to 101 community-based organisations, known as Learn Local organisations, and two adult education institutions, the Centre of Adult Education (CAE) and Adult Multicultural Education Services (AMES).

This network of Learn Local providers delivers education and training programs to a broad range of Victorians over compulsory school-leaving age - young people, older people, people with special needs, people from diverse cultural backgrounds – with a special focus on people who have had limited prior access to education.
1. Current major infrastructure assets

TAFE
The 12 standalone TAFE public providers are independent organisations whose executive and boards make decisions on assets. They receive funding through the VTG for the number of student contact hours delivered for VET activities and fee for service activities. Should TAFEs want to sell, lease or purchase assets this needs to be consistent with the commercial and strategic guidelines in Education and Training Reform Act 2006 and have formal approval from the Minister for Training and Skills as required by the legislation. Institutes are required to manage and maintain assets on a commercial basis consistent with the Act, as well as complying with essential safety measure (ESM) requirements and industry standards.

All institutes are required to have a current asset management plan that is:
- endorsed by their board
- reviewed by the department
- approved by the Minister.

The costs of maintaining and servicing of assets is one of a number of cost and obligations recognised in the recently released VET Funding Review and Government Response. One of the recommendations is to recognise this cost in the price paid to TAFE public providers.

Victoria’s TAFEs have a total of 90 campuses and 731 buildings. Dual Sector Universities (Swinburne, RMIT, Federation University and Victoria University) contribute 28 campuses and 127 buildings. Government funding made up 47.6 per cent ($427.1 million) of TAFE revenue, a further 45% is made up from student revenue.

Private Providers
DET has no responsibility or involvement with the assets of privately operated RTOs organisations funded under the VTG. These providers consist of:
- commercial training providers
- the training department of manufacturing or service enterprises,
- the training function of employer or employee organisations in a particular industry
- Group Training Companies
- community learning centres and neighbourhood houses
- secondary colleges providing VET programs.

In size these private providers vary from single-person operations delivering training and assessment in a narrow specialization, to large organisations offering a wide range of programs.

Many receive government funding through the Victorian Training Guarantee and fee for service to deliver programs to apprentices or trainees, to disadvantaged groups, or in fields which governments see as priority areas. They are not bound to gain approval on leasing, buying and selling assets from the minister or department.

### Higher Education (> 365,000 learners)
In addition to the 12 standalone TAFE institutes, Victoria has four dual sector universities that act as both VET and higher education providers. These include, Swinburne University of Technology, RMIT, Victoria University and Federation University. There are also four public universities that only deliver higher education, including, University of Melbourne, Deakin University, Latrobe University and Monash University. The Australian Catholic University has campuses in Victoria but is classified as a multi-state university and the University of Divinity is a private university operating in Victoria.

State legislation governs public universities and the entities are multi-jurisdictional funded. Like TAFE institutes, Universities are required to gain Ministerial approval on any transactions in excess of $5 million and leases with a tenure over 21 years.

<table>
<thead>
<tr>
<th>Sub-Sector</th>
<th>Assets</th>
<th>Ownership</th>
<th>Management</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Higher Education</strong></td>
<td>8 Universities (inc, 4 Dual Sector)</td>
<td>Publicly-owned</td>
<td>Independent</td>
<td>2015 PP&amp;E $11.7billion</td>
</tr>
<tr>
<td><strong>VET</strong></td>
<td>12 TAFEs (+4 Dual Sector Universities)</td>
<td>Publicly-owned</td>
<td>Independent</td>
<td>Data Gap</td>
</tr>
<tr>
<td><strong>RTOs</strong></td>
<td>1,100 Registered Training Operators</td>
<td>Private</td>
<td>Independent</td>
<td>Data Gap</td>
</tr>
<tr>
<td><strong>Non-Government</strong></td>
<td>699 Schools (VRQA)</td>
<td>Private</td>
<td>Independent / Catholic</td>
<td>&gt;$5.5billion</td>
</tr>
<tr>
<td><strong>Government</strong></td>
<td>1,540 Schools (VRQA)</td>
<td>DET</td>
<td>Department of Education and Training</td>
<td>2015 PP&amp;E $16.8billion</td>
</tr>
<tr>
<td><strong>Early Childhood</strong></td>
<td>4,012 registered Child Care providers (ACEQA)</td>
<td>Local Government, Community &amp; Private</td>
<td>Independent</td>
<td>Data Gap</td>
</tr>
</tbody>
</table>
2. Current asset investment

Education and Training Sector

The main drivers for asset investment in the education and training sector include, population growth and the provision of education and skills to the Victorian population spanning from birth to adulthood.

The assets within the sector are predominately buildings with long life spans in excess of 50 years. The condition for asset replacement are typically when the asset is no longer fit for purpose, whether from structural degradation or the facilities are inadequate for current usage requirements.

A benchmarking study undertaken by the Commonwealth Government established a benchmark for university facilities in a good condition without backlog maintenance issues is 1.5 per cent of Asset Replacement Value (ARV). The 2013 VAGO audit of school infrastructure notes, industry benchmarks show that an annual maintenance investment of 2 per cent of the ARV is necessary to preserve buildings at a suitable standard.

### Asset group | Sustain | Renewal & replacement | Inter-jurisdiction comparison
--- | --- | --- | ---
Higher Education | 1.5% of estimated ARV ~$175 million | Data Gap | TEFMA
VET | TAFE | $195m in backlog maintenance | Data Gap | Further research required – NSW comparison
RTOs | Data Gap | Data Gap | Data Gap
Schools | Non-Government | Private | Data Gap* | Data Gap*
Government | 2% of ARV of $13.6 billion is ~$272 million | $1.3 billion to address condition & functionality | Further research required – NSW comparison
Early Childhood | Data Gap | Data Gap | Data Gap

### Schools: Government

In 2012 the Victorian Auditor General found that residual issues with the condition of buildings are influenced by a long legacy of government under-investment in the maintenance of school buildings. Industry benchmarks show that an annual maintenance investment of 2 per cent of the asset value is necessary to preserve buildings at a suitable standard. In 2012, the Government provided $87 million to schools to maintain buildings—only 32 per cent of the recommended investment level of $272 million.

This figure illustrates the discrepancy between projected funding levels for 2015–16 and industry benchmarks. DET has received funding of approximately $100 million for all maintenance activities. The funding required to reach the benchmark level of 2 per cent of asset replacement value is ~$272 million. (Note, if consistent levels of capital funding are expended to improve the condition of assets, industry benchmarks decrease over time and lower levels of maintenance funding are required.)
2. Historical asset investment

Schools

In 2013-14, Victorian government schools received a total of $6,151 million, including self-generated revenue. This is an average of around $10,880 per student.

Student Resource Package (SRP)

The SRP is DET’s model for allocating funding to schools and has three main funding categories:

- **student-based funding**
- **school-based funding**
- **targeted initiatives**.

School-based funding includes costs associated with infrastructure, such as cleaning, minor building works and grounds maintenance, as well as costs for specific programs, such as bus coordination, instrumental music programs and language assistants. Of the $348 million School-based funding $48 million (14 per cent) was for maintenance and minor works and $31 million (9 per cent) was for minor supplement and urgent works.

The $48 million allocated to schools for maintenance and minor works has a weighting for asset utilisation, building age and building fabric. This approach attempts to align the distribution of maintenance funding across the portfolio to an asset-life-cycle approach to asset management.

Source: Victorian Auditor-General's Office.
3. Current major infrastructure projects

2015-16 State Budget

The 2015-16 State Budget commits an additional $2.9 billion across the sector, with approximately $1 billion committed to infrastructure investment. This includes:

- $325 million to renovate, refurbish and rebuild 67 schools, with nine receiving major rebuilds of $10 million or more
- $111.11 million to support the delivery of 10 new schools
- $40 million to purchase land for new schools
- $120 million in grants for Catholic and independent schools across Victoria to contribute to the cost of building new schools in high-growth areas and upgrading facilities in existing schools
- $35 million for more than 120 new relocatable classrooms
- $350 million for TAFE
- $59 million for early childhood development
- $12 million for Tech Schools.

New Schools PPP - $291 million

The New Schools Public Private Partnership (PPP) Project will see 15 high priority new government schools delivered across a number of Victoria’s fastest growing metropolitan and regional communities.

The schools will open in two groups, with the first group of schools to open to students for Term 1, 2017, and the second group for Term 1, 2018.

Under the PPP model, the new schools will be financed, designed, constructed and maintained by the private sector to high contractual standards over 25 years, allowing Principals and teachers to focus on student learning, rather than asset management.

The schools are designed as community hubs and will encourage community use and additional community facilities and programs through a partnership with the YMCA. The schools will also support inclusion of all learners, including students with a disability.

In addition to the 15 schools, the PPP will also deliver:
- 6 early learning centres - proposed to be operated by YMCA and providing integrated long day care services
- expanded indoor gymnasiums to Netball Victoria standards
- a learn to swim pool at Mernda Central Prep - Year 12 school
- a hydrotherapy pool at North Geelong Special Developmental School
- additional multi-purpose spaces which will be used by the school during the day and operated by YMCA after hours to deliver before and after school care and other community programs
- commercial kitchens at four schools, enabling the delivery of hospitality related VET programs

Local families will be kept up-to-date on the creation of their new schools via community briefings prior to and during construction as well as before school openings.
3. Current major infrastructure projects

2015-16 Budget Paper Regional Victoria investment locations

The 2015-16 State Budget committed significant funding to multiple regional sites across the Education and Training sector.

Source: Victorian Budget 15/16
For Families: Rural and Regional Budget Information Paper
3. Current major infrastructure projects

Metro Victoria Government Schools investment locations

School Upgrades
- Albany Rise Primary School
- Amsleigh Park Primary School
- Bayside College
- Beaumaris High School
- Bentleigh Secondary College
- Berwick Fields Primary School
- Bimbadeen Heights Primary School
- Boronia Heights Primary School
- Brunswick Secondary College
- Carlton Primary School
- Chandler Park Primary School
- Cheltenham Secondary College
- Clifton Hill Primary School
- Cranbourne Secondary College
- Dandenong High School
- Elwood College
- Emerald Secondary College
- Essendon East Keilor District College
- Frankston Primary School
- Glen Eira College
- Glen Waverley Primary School
- Greensborough Secondary College
- Hampton Park Primary School
- Highvale Secondary College
- Jells Park Primary School
- Keysborough Secondary College
- Lyndale Secondary College
- McKinnon Secondary College
- Melba Secondary College
- Mill Park Heights Primary School
- Monbulk College
- Monterey Secondary College
- Montmorency Secondary College
- Moorooduc Primary School
- Mooroolbark East Primary School
- Mordialloc College
- Mornington Primary School
- Mullauna Secondary College
- Mullum Primary School
- Noble Park Secondary College
- Northcote High School
- Norwood Secondary College
- Parkdale Primary School
- Parkhill Primary School
- Patterson River Secondary College
- Preston High School
- Ringwood Secondary College
- Sandringham College
- Seaford Park Primary School
- South Yarra Primary School
- Springvale Rise Primary School
- St Helena Secondary College
- Stonnington Primary School
- Strathmore Primary School
- Sunbury College
- Sunshine College
- The Basin Primary School
- Viewbank College
- Wallan Secondary College
- Wattle Park Primary School
- Werribee Secondary College
- Westbreen Primary School
- William Ruthven Secondary College
- Williamstown High School
- Yarra Junction Primary School

New Schools
- Albert Park College – Year 9 campus
- Craigieburn North West Primary School
- Footscray Learning Precinct (Footscray City Primary School, Footscray City College)
- Hazel Glen College completion
- Mernda Central 7-12
- Richmond High School
- South Melbourne Park Primary School
- Tarneit P-9 College completion

Source: Victorian Budget 15/16 For Families: Suburban Growth Budget Information Paper
3. Current major infrastructure projects

**TAFE**

$320 million TAFE Rescue Fund

Government has committed to $220 million of output funding and $100 million of asset funding. The funding will be allocated over a five year period, ceasing in 2018-19.

$65.8 million of the asset funding has been committed to the following projects:

<table>
<thead>
<tr>
<th>Institute</th>
<th>Purpose</th>
<th>Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bendigo Kangan Institute</td>
<td>To support the expansion of agricultural training at its Charleston Road campus in Bendigo.</td>
<td>$7.8 million</td>
</tr>
<tr>
<td>Federation University Australia</td>
<td>To support an industry hub at the Ballarat campus</td>
<td>$5.0 million</td>
</tr>
<tr>
<td>Melbourne Polytechnic</td>
<td>To reopen the Greensborough campus</td>
<td>$10.0 million</td>
</tr>
<tr>
<td>Swinburne University</td>
<td>To reopen the Lilydale campus and build a new facility for Melba Support Services</td>
<td>$10.0 million</td>
</tr>
<tr>
<td>Chisholm Institute</td>
<td>To support the redevelopment of the Frankston campus</td>
<td>$25.0 million</td>
</tr>
<tr>
<td>Holmesglen Institute</td>
<td>To develop a new student hub at the Moorabbin campus</td>
<td>$8.0 million</td>
</tr>
</tbody>
</table>

**University Sector**

Victorian public universities have varying approaches to asset management and capital investment.

**Monash University - Strategic Plan 2015-2020**

$1 billion in capital infrastructure, including facilities, equipment and information technology.

**The University of Melbourne - Strategic Plan 2015-2020**

- The Melbourne Biomedical and Biosciences Campus
- Carlton Connect
- The Southbank arts precinct
- A public policy precinct at Carlton
- A potential new engineering research campus.

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**Carlton Connect – The University of Melbourne**

The University of Melbourne is creating Australia’s premier innovation precinct – to be known as Carlton Connect – at the former Royal Women’s Hospital site on the edge of Melbourne’s CBD.

Carlton Connect is one in a suite of major transformational initiatives being pursued by the University that will significantly benefit the Australian economy and society. Carlton Connect will co-locate people from large businesses, all levels of government, research disciplines, small start-ups and social enterprises together in a central place, anchored by Australia’s No. 1 University. The Carlton Connect Initiative will assist in building key capabilities such as establishing linkages between researchers and industry, business, venture capital, global partnerships and entrepreneurial skills.

Carlton Connect has two key components: the creation of a vibrant place; and a focus on collaborative partnerships. Carlton Connect will generate:

- New knowledge
- New skills
- New jobs
- New solutions to pressing social and environmental problems

Source: www.carltonconnect.com.au
3. Current major infrastructure projects

RMIT University
RMIT University has embarked upon a $800 million capital works program, which will be rolled out over a six-year period. This investment represents the largest expenditure on capital works in RMIT's 128-year history.

Deakin University
Deakin is transforming its Melbourne Burwood Campus through a three-year program starting in 2015. This campus infrastructure program includes upgrades to several existing buildings, construction of new buildings and upgrades to heating and cooling equipment.

La Trobe University
*Short-Term Initiatives 2014-2022*
This stage sees the initial northern expansion of academic and residential built form, as well as the development of regional facilities with the eventual goal of creating a university town as part of the Bundoora campus. The early stages of the Primary Pedestrian Network begin to create an armature for future campus development.

Swinburne University
Over the last six years (2010-2015 inclusive), Swinburne University of Technology has invested more than $260m in capital infrastructure projects. Highlights have included:

- Advanced Manufacturing and Design Centre building which was completed in June 2014 and is Swinburne’s second 5-star Green Star building incorporating the Factory of the Future, student hubs, a pilot plant for solar cell research, and the Design Factory
- Swinburne Green Trades Complex constructed at Croydon campus to provide and showcase training for sustainable practice across a range of trades
- Advanced Technology Centre (ATC) building
- The George building housing a range of student services, informal study areas, health services and multi faith facility
- Construction of the Knox Innovation Opportunity and Sustainability Centre (KIOSC), a trades training centre at Wantirna which enables secondary school students to study a wide range of vocational education and training units.

Over the next five years (2016-2020 inclusive), Swinburne currently estimates it will invest $150m in capital infrastructure projects which will include conversion of a former fire station into an innovation precinct, repurposing and refurbishing existing teaching spaces to create flexibility for more diverse learning environments across each campus and a refurbishment program for the student residential buildings.

*No information was publically available for the Federation and Victoria Universities at the time of this report.*

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**Greener Government Buildings**

The Greener Government Buildings Program (GGB) is a Victorian Government initiative developed and managed by the Department of Treasury and Finance (DTF) which seeks to achieve energy savings and reduce greenhouse gas emissions in existing government buildings.

The GGB Program follows an Energy Performance Contracting (EPC) process whereby an Energy Services Company (ESCO), is engaged by an institute to identify, design, install and commission upgrade solutions at existing buildings and facilities.

The ESCO is required to guarantee minimum annual project savings (energy, water, maintenance, etc.). This increases the surety that the performance outcomes of installed solutions will meet specifications. In the event of a savings shortfall, ESCOs pay the difference to the customer.

Projects are funded through an interest-free public account advance as per section 37 of the Financial Management Act 1994.

The GGB Program has funded energy efficiency projects in six TAFE institutes Kangan (before they joined Bendigo TAFE to become Bendigo Kangan), South West, Sunraysia, Holmesglen, Chisholm and Melbourne Polytechnic and one Higher Education provider RMIT with a total worth $41.653M and expected annual greenhouse gas (GHG) savings of over 44,000 tonnes a year.
4. Infrastructure planning and maintenance

**Education and Training Sector**

**Government Funding**

The sector is heavily reliant upon government funding, by either direct or indirect means. The government provides direct funding, below industry best practice, for Government Schools whilst TAFEs, Universities and RTOs receive funding through grants and subsidies. Maintenance of the assets across the sector is the responsibility of the individual provider/school principal.

**Decentralisation**

The decentralisation, caused by the devolved model for Government Schools and individual management by catholic and independent schools, results in the management of the school sector on an asset-by-asset basis and not a portfolio or optimised approach. This also applies to the other two sub-sectors but is attributed to the private ownership and governance.

**Short capital planning cycles**

The impact of the short term budget cycles on DET’s ability to forward plan and undertake strategic asset renewal is obvious. In recent years, the TAFE asset base has suffered as a result of funding uncertainty amid an adjustment period to a competitive market.

**Schools: Government**

DET oversees planning across the sector to varying degrees and is responsible for the strategic management of the Victorian Government school building portfolio. This includes planning for, and providing advice to government regarding investment in new schools. DET does this through the regular monitoring of residential growth, demographic change and enrolment trends across Victoria. This ensures that current and future demand for schools is properly planned.

**Asset Strategy**

In response to VAGO findings, DET developed an evidence-based, long-term asset strategy to guide investment across the government school sector. The strategy is an internal operational document that provides DET with strong governance and asset management practices, aimed at supporting world-leading education outcomes. The goals of the Asset Strategy include a sustained effort by DET to drive improvements to the asset base over the next 10 years, including themes such as:

- delivering a safe and high-quality asset base
- delivering an asset base that meets demand and responds to need
- a focus on community engagement with Victoria’s government schools
- accountability and capability of asset managers
- sustainability and value-for-money
- evidence-based decision-making throughout asset lifecycles.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Ownership</th>
<th>Asset management responsibilities</th>
</tr>
</thead>
</table>
| Early childhood | Over 4,000 approved early childhood services operating under various ownership models including private, community and local government Limited number of early childhood facilities on school sites owned by DET | • No role in acquisition, maintenance or disposal  
• Limited role in planning  
• Regulatory role to ensure space and quality requirements are met  
• Allocates grants for new and existing facilities |
| Schools      | Owns and operates more than 34,000 government school buildings            | • DET is responsible for asset management of the school asset base across the entire lifecycle        |
| Training and skills | providing vocational education and training                              | • No direct provision role  
• TAFEs required to self-manage assets.  
• Funding grants used to support TAFEs |

Deloitte Touche Tohmatsu © 2016 - Infrastructure Capability Assessments
4. Infrastructure planning and maintenance

**Schools: Government**

**Asset Management Plans**

DET has developed an asset management planning approach that assists schools in developing a five-year plan to support their local strategic priorities, address their outstanding condition and functionality requirements, and provide an accountability mechanism. Introduced by DET in 2014–15, school-based Asset Management Plans (AMPs) are strategic documents that must be completed by schools receiving Capital Works or Planned Maintenance Program funding. The five-year plans seek to integrate capital works and maintenance planning and are key to ensuring schools spend funding on intended purposes. By facilitating strategic planning, AMPs also build schools’ asset management capabilities. DET assists in the preparation of AMPs and Departmental approval of AMPs is required before commencing the plan and initiating projects.

An AMP has three stages.

- **Gate 1** outlines a school’s educational directions and documents the condition of school facilities. Schools also develop a list of priority projects they wish to undertake to achieve their educational objectives
- **Gate 2** refines project details and the engagement of consultants, including architects and project managers, as required
- **The implementation stage** details the design and delivery of projects.

The AMP focuses attention on asset management and encourages schools to think about their infrastructure needs over a five-year period. It empowers schools to optimise their infrastructure funding by encouraging school leaders to clearly define projects, budgets, timelines and cash-flow.

When schools develop their AMP in conjunction with DET, priority is given to facilities in poor condition. AMPs are not approved if they propose diverting funds to optional projects while poor-condition facilities go unaddressed. This helps ensure that all facilities at a school are properly maintained, rather than having buildings in disparate condition.

To support principals, the AMP process is complemented by training. Technical Leadership Coaches and regional offices also support schools to develop AMPs.

**Maintenance**

A proportion of the annual funding Government provides to schools is notionally allocated for the maintenance of buildings. However, Government schools operate within a devolved model which gives principals and school communities the power to make decisions that best reflect their local needs.

In keeping with this principle of local autonomy, schools have discretion to direct maintenance funding as they choose (VAGO 2013) and are required to maintain buildings at an appropriate standard, so they are safe, secure and comply with relevant regulations.

**Capital Works**

- DET and school councils have access to the Construction Supplier Register (CSR) for the procurement of building and construction industry consultants and contractors
- DET centrally manages the Relocatable Transfer Program and is responsible for procuring the supply of new relocatable buildings and for undertaking capital upgrades/refurbishment when relocating buildings between schools
- There is no standardised design for school facilities and no mandated requirements regarding building materials.

The VAGO Implementation of School Infrastructure Programs, February 2013 identified the following issues with DET’s current devolved capital works and maintenance model:

- There is a lack of long-term funding certainty in terms of both the funding provided to DET and the funding allocated by DET to schools, making it difficult for DET and schools to make efficient, long-term asset management decisions (noting that most funding decisions are made annually whereas asset management cycles span a number of years). This can result in a focus on reactive maintenance rather than a more cost-efficient focus on planned preventive maintenance
- Schools have historically had limited accountability in relation to how SRP funding is used and DET has had limited transparency regarding day-to-day maintenance activities and expenditure
- There are different levels of asset management expertise at schools across the portfolio, contributing to inconsistencies in asset standards.
4. Infrastructure planning and maintenance

Relocatable School Buildings

To manage fluctuations in demand, DET utilises Relocatable Buildings. The buildings are deployed to school grounds at the discretion of the School Principal but with general guidelines provided by DET. Each building provides 2 classrooms which can accommodate approximately 25 students each. DET Building Quality Standards Handbook provides guidelines and considerations for planning and deployment of Relocatable Buildings.

Energy Saving

DET is currently rolling out new relocatable classrooms which incorporate:

- low-energy lighting that automatically adjusts to light levels within the room
- double-glazed windows
- insulation in the ceiling, walls and floor
- ceiling fans with a summer and winter setting
- smart solar-powered units that take air from the roof space and divert it outside in summer to prevent heat build-up, and into the room in winter to supplement heating
- a computer-controlled ventilation system that monitors air quality and temperature and brings outdoor air into the room as needed according to various day and night conditions
- a building control system that turns off lighting and ceiling fans when the room is unoccupied, and regulates the use of the heating and cooling system.

These enhanced facilities have the potential to save considerable amounts of energy.

Two Storey Innovation

A recent innovation is the manufacture of two-storey relocatable facilities for use in inner-city schools and on restricted school sites.

The off-site manufacture of relocatable buildings enables their speedy placement and commissioning, and reduces disruption for school communities.

Joint Use Arrangements

Many school sites will have some form or shared use arrangement on their school site but its only where there has been an investment from a 3rd party or a specific grant, this agreement will typically be either a Development and Joint Use Agreement (DJUA), Joint Use Agreement (JUA), or a Community Joint Use Agreement (CJUA).

Aldercourt PS and Noah’s Ark Inc

Context and intent: The Primary School had a significant portion of their buildings unused. Noah’s Ark Inc. is a not-for-profit that runs an early childhood intervention and inclusion support program for students with additional needs.

Agreement & Facility: The Community Joint Use Agreement for the refurbishment, management and use of meeting rooms, offices and storage rooms on the school site.

Fee: $1.00 per annum.

Term: 10 years.

Middle Kinglake Primary School

Context and intent: As a result of the bushfire season in 2009, the Middle Kinglake PS was surrendered to the crown and DET. The Middle Kinglake Primary School Council, the Murrindindi Shire Council and DET with the Victorian Bushfire Reconstruction and Recovery Authority worked together to relocate the primary school and at the same time create a community precinct with early childhood facilities and a memorial space.

Agreement(s) and facilities:

Ground Lease between the Minister and the Murrindindi Shire Council where DET leases the entire school site from the Murrindindi Shire Council (the is the head lease to the suite of agreements listed below).

Sublease back to the Murrindindi Shire Council for the Children’s Centre built on site. Includes provision for a Preschool Sublicense between Murrindindi Shire Council and the Children’s Centre operator.

Joint Use Agreement between the Minister, the Middle Kinglake Primary School and the Murrindindi Shire Council for all shared services on site, the agora (memorial space) and the car park.

Fee: $11.00 for the term of the head lease, peppercorn fees for the JUA and the Sublease.

Term: Ground lease- Sublease for 33 years, plus two further terms of 33 years. Sublease for 33 years, Joint Use Agreement for 33 years, plus two further terms of 33 years. All agreements end if the head lease is terminated for any reason.

Issues and comments: The design and approach to this suite of agreements may not have been the most effective structure for this situation; however given the nature and sensitivity of the situation, it was too late to change the approach by the time the agreements were being negotiated effectively.

Source: www.education.vic.gov.au
4. Infrastructure planning and maintenance

Higher Education / TAFE / VET / Non-Government Schools / Early Childhood

Management of maintenance and planning by non-government organisations is undertaken independently with guidelines and frameworks provided by industry associations. The following industries are established industry associations in the sector:

- Independent Schools Victoria (ISV)
- Tertiary Education and Facilities Maintenance Association (TEFMA)
- Independent Schools Council of Australia (ISCA)
- Catholic Education Commission of Victoria (CECV)
- Early Learning Association Australia (ELAA)
- Universities Australia (UA)

The performance and regulation of TAFE and Early Childhood is overseen by DET and ACECQA respectively.

Early Childhood - Kindergarten

Overview

Kindergarten or preschool is the educational component of Early Childhood. The facilities have similar but slightly differing requirements from other services within the Early Childhood sector. The sector has a mix of kindergarten (ages 4 and 5) service providers being:

- local government
- community-based incorporated associations
- private and community-based child care providers
- non-government and government schools.

To meet the needs of children and families kindergarten facilities and programs are provided in a variety of settings including:

- standalone kindergartens
- long day care centres
- children’s centres
- community centres
- schools

Funding

Children usually attend kindergarten for 15 hours a week, often split across a number of sessions. Kindergarten costs can vary widely in fees. The Victorian Government pays kindergartens a subsidy for every four year old child to reduce costs.

Maintenance and Planning

Planning of ECE centres is often undertaken in conjunction with DET or local government, but non-government providers are independently control managed. Major players, such as Goodstart, likely have standardised procedures across their asset base but aside from the National Quality Framework, OH&S laws and regulation there is no central body across the sector.
4. Infrastructure planning and maintenance

Reform of the Federation White paper

The Commonwealth Government has committed to produce a White Paper on the Reform of the Federation. The white paper will examine the responsibilities of different governments, to ensure that, as far as possible, the States and Territories are sovereign and the processes are the most efficient.

Issues paper 4 has identified the current roles and responsibilities of State and Federal Government in relation to the Education and Training sector. This is presented in the following graphs. Different areas are identified as policy, funding, delivery and regulation. The role of maintenance of government owned assets rests with the state across the sector but funding, regulation and policy decisions are often shared with varying degrees of overlap.

The graph below highlights the funding source and contributions to schools.
### Early Childhood

<table>
<thead>
<tr>
<th>Area</th>
<th>State and Territory role</th>
<th>Commonwealth role</th>
<th>Overlaps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy</td>
<td>Secondary</td>
<td>Lead</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>Policy lead for preschool.</td>
<td>Policy lead for child care affordability.</td>
<td>Both levels of government have a policy role. For quality and access (including preschool access), these roles are coordinated through COAG. However, the Commonwealth and the States and Territories independently develop and implement policy to target equitable access to child care and early learning.</td>
</tr>
<tr>
<td></td>
<td>Policy lead for services not covered by the NQF.</td>
<td>Shared policy role with respect to quality (through the NQF) and equitable access.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Shared policy role with respect to quality (through the NQF) and equitable access.</td>
<td>Secondary policy role with respect to preschool access (through the NP on Universal Access).</td>
<td></td>
</tr>
<tr>
<td>Funding</td>
<td>Lead</td>
<td>Secondary</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>Shared funding role for preschool (though the relative contribution of each government varies according to how services are delivered).</td>
<td>Majority funder of child care (through fee assistance).</td>
<td>Some services attract Commonwealth child care funding (through fee assistance) as well as State or Territory preschool funding.</td>
</tr>
<tr>
<td></td>
<td>Provides funding to ensure equitable access to services and support workforce development.</td>
<td>Majority funder of information services.</td>
<td>Both levels of government directly contribute funds to ensure quality, equitable access to services and to support workforce development.</td>
</tr>
<tr>
<td>Delivery</td>
<td>Lead</td>
<td>Secondary</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>Provides preschool services (though the extent to which governments directly deliver preschool services varies across jurisdictions).</td>
<td>Directly supports the delivery of around 340 child care services, predominantly in regional, remote and Indigenous communities.</td>
<td>There is minimal overlap, as Commonwealth funded services target areas where mainstream services would be unviable.</td>
</tr>
<tr>
<td>Regulation</td>
<td>Lead</td>
<td>Lead</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>Lead for approving (licensing) and regulating services (including those covered by the NQF). Works with the Commonwealth to oversee the NQF.</td>
<td>Lead for regulating the use of Commonwealth child care fee assistance. Works with States and Territories to oversee the NQF.</td>
<td>Most services are subject to both Commonwealth and State or Territory regulation and reporting obligations – though for different purposes.</td>
</tr>
</tbody>
</table>

### Higher Education

<table>
<thead>
<tr>
<th>Area</th>
<th>State and Territory role</th>
<th>Commonwealth role</th>
<th>Shared roles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy</td>
<td>Secondary</td>
<td>Lead</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>Shared responsibility for national policy</td>
<td>Responsible for jurisdiction-based policy, including apprenticeships</td>
<td>Both levels of government collaborate in developing national policy</td>
</tr>
<tr>
<td>Funding</td>
<td>Lead</td>
<td>Secondary</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>Majority funder of public TAFE institutes</td>
<td>Secondary funder of students, including apprentices, through income support, income contingent loans and targeted training programmes</td>
<td>Some areas of overlap in delivery of support services for apprentices and in management of training to certain groups</td>
</tr>
<tr>
<td>Delivery</td>
<td>Lead</td>
<td>Secondary</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>Responsible for the delivery of policies and programmes associated with VET within their jurisdictions, including contracting (delivery of training is through third parties, i.e. RTOs)</td>
<td>Responsible for administration of TAFE institutes</td>
<td>Commonwealth and States and Territories share responsibility for national standards and cooperate in regulation</td>
</tr>
</tbody>
</table>

### Key

<table>
<thead>
<tr>
<th>Extent of shared space</th>
<th>Lead</th>
<th>Secondary</th>
<th>Shared</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>Medium</td>
<td>Low</td>
<td></td>
</tr>
</tbody>
</table>
5. Pricing schemes

**Education & Training Sector**

Educational providers across the sector receive a significant portion of funding through government grants, student fee loan schemes and subsidies. In the case of Higher Education, a significant portion of income comes from Australian Government through loans and grants. In comparison to TAFE which is predominately State Government funded.

**FEE-HELP / HECS-HELP / SA-HELP**

HECS-HELP / Commonwealth Supported Place (CSP)

Eligible students can apply for a Commonwealth supported place at any of the public universities and some private education providers in national priority areas (nursing and education) for undergraduate degrees. The Commonwealth subsidises a portion of the tuition with a student contribution covering the rest. The Commonwealth regulates both government and student contributions varying per course allowing the Higher Education provider to set the total tuition cost with a range set by the Commonwealth. Student contributions may therefore vary between higher education providers and courses. Student contributions range from $0 - $10,440 per year for an equivalent full-time study load (EFTSL). The student contribution can be paid up front or deferred through the HECS-HELP student loan scheme.

**FEE-HELP**

Students not eligible for a CSP enrolment can apply for a government sponsored FEE-HELP loan.

**SA-HELP**

Assists eligible students to pay for all or part of their student services and amenities fee.

**Schools: Government**

Primary and Secondary tuition is fully funded by Government.

**VET FEE-HELP**

Is available to assist eligible students studying higher level vocational education and training (VET) qualifications to pay their tuition fees.

---

**8 Public Universities**

During the 2014 calendar year the eight universities received 35.5% of their revenue ($2,712 million) from Commonwealth Government grant funding and 17.5% from HECS/FEE/SA-HELP schemes totalling 53% Australian Government Financial Assistance. State and Local Government provided 2.73% of financial assistance. Fee paying overseas students contributing 20% of total revenue. 

(HEP Finance 2014, October 2015)

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**Asset group**

- Higher Education
- VET (TAFE/RTOs)
- Schools
- Early Childhood

**Pricing scheme**

- Grants, CSP, HECS-HELP, FEE-HELP, Attendance Fees
- Grants, VET FEE-HELP, Attendance Fees
- Public Sector tuition is fully government funded. Private Sector fees are not regulated.
- Grants, Planning, Attendance Fees

---

**Australian Government Financial Assistance**

- HECS-HELP 25%
- FEE-HELP 7%
- SA-HELP 1%
- Grants 67%

---

**Victorian 8 Public Universities Income**

- Australian Government Financial Assistance 53%
- Fees and Charges 26%
- Other Income 18%
- Sale of goods and services 45%
- Government grants 48%
- Students fees 20%
- Interest revenue 4%
- Other revenue 1%

Source: Victorian Auditor-General’s Office, TAFE Audit, 2014
5. Pricing schemes

Early Childhood – Kindergarten (Preschool)

The Victorian kindergarten program is a one to two year pre-school program for children before they enter primary school. Kindergarten is not compulsory in Victoria but it does help children to develop social, mental and physical skills in preparation for school. Approximately 27 per cent of children, including Commonwealth concession card holders and Aboriginal and Torres Strait Islander children, are funded to receive a free kindergarten program and in 2014-15, 96.4% of eligible Victorian children attended kindergarten.

Victoria offers a range of kindergarten options. Children usually attend kindergarten for 15 hours a week, often split across a number of sessions. Kindergarten costs can vary widely in fees. The Victorian Government pays kindergartens a subsidy for every four year old child to reduce costs.

National Partnership Agreement on Universal Access to Early Childhood Education

The first National Partnership Agreement on Early Childhood Education was signed by the Council of Australian Governments on 29 November 2008. Under this agreement, all governments committed to work together to ensure that all children have access to a quality early childhood education programme, delivered by a qualified early childhood teacher for 15 hours per week or 600 hours of preschool education in the year before they attend full-time school.

Under a series of National Partnerships the Commonwealth has made available more than $2.8 billion to states and territories to progress this goal.

The Commonwealth Government provides funding to the Victorian Government to assist meeting the cost of the additional five hours of kindergarten funding in addition to the Victorian contribution for 10 hours.

Source: The Kindergarten Guide 2015 - DET

Commonwealth

Child care and early learning services attract a mix of Local Government, State, Territory and Commonwealth funding, and the composition of funding is different in each jurisdiction. Different levels of Government make most funding decisions independently. Individuals also contribute to the sector through the payment of fees. Over the past five years, fees have grown on average by 7.8 per cent per annum. The Commonwealth provides around 80 per cent of government funding for child care and early learning. Around 85 per cent of this funding goes to Childcare Benefit (CCB) and Childcare Cash Rebate (CCR) to help families meet the cost of child care. Kindergartens in public schools and some services operating under the Budget Based Funded Programme are free from compulsory fees.

Source: Reform of the Federation Issues Paper 4

Victoria

In 2014, the Government secured two further years of Commonwealth funding for 15 hours of kindergarten for four-year-olds under the National Partnership Agreement on Universal Access to Early Childhood Education. Victoria is expected to receive approximately $204 million under the National Partnership across 2016 and 2017. In addition, the Victorian Government provided $83.7 million over four years to support early childhood services to transition to improved educator-to-child ratios, as required under the National Quality Framework. From the start of 2016, Victorian kindergarten services will move from an educator-to-child ratio of 1:15 to 1:11 or better. On capital investment, the State Budget provided $50 million over four years to upgrade kindergartens and integrated children’s centres, particularly in areas experiencing rapid population growth and those with high levels of disadvantage.

Rates of participation in kindergarten services for Victorian children in the year before school also remained high, at 96.4 per cent, with a new methodology (counting children rather than enrolments) providing a more accurate picture than previously.

Source: DET 2015 Annual Report
5. Regulatory schemes

Victorian Registrations & Qualifications Authority (VRQA)

HECS-HELP / Commonwealth Supported Place (CSP)

The VRQA registers providers of:
- Vocational Education and Training (VET) that deliver accredited training to domestic students in Victoria only, or Victoria and Western Australia only
- school education
- senior secondary education – both school and non-school providers
- overseas secondary student exchange organisations.

The VRQA is responsible for:
- registration of certain VET qualifications and accreditations of certain VET courses.
- registration of senior secondary courses delivered by schools and non-school education providers.

Australian Skills Quality Authority (ASQA)

The Australian Skills Quality Authority (ASQA) is the national regulator for Australia's vocational education and training sector. ASQA regulates courses and training providers to ensure nationally approved quality standards are met.

Tertiary Education Quality and Standards Agency (TEQSA)

TEQSA regulates and assures the quality of Australia's large, diverse and complex higher education sub-sector. TEQSA registers and evaluates the performance of higher education providers against the Higher Education Standards Framework - specifically, the Threshold Standards, which all providers must meet in order to enter and remain within Australia's higher education system.

Australian Children’s Education & Care Quality Authority (ACECQA)

ACECQA is an independent national authority, whose role is to educate and inform the wider community about the importance of improving outcomes in children's education and care. ACECQA provide governments, the sector and families with access to the most current research to ensure NQF policy and service delivery is in line with best practice across the country.

National Quality Framework

The National Quality Framework (NQF) is the result of an agreement between all Australian governments to work together to provide better educational and developmental outcomes for children using education and care services. The National Quality Standard (NQS) is a key aspect of the NQF and sets a national benchmark for early childhood education and care, and outside school hours care services in Australia.

In Victoria, responsibility for administering the National Quality Framework is shared between DET and the ACECQA.

National Quality Standard (Assessment Criteria)

The physical environment is safe, suitable and provides a rich and diverse range of experiences which promote children's learning and development.
- The design and location of the premises is appropriate for the operation of a service
- The environment is inclusive, promotes competence, independent exploration and learning through play
- The service takes an active role in caring for its environment and contributes to a sustainable future.
5. Regulatory Authorities and opportunities for multiple service offerings

Regulatory Authorities

ASQA & VRQA

There is some shared space between the Federal (ASQA) and State (VSQA) Authority’s for regulation of courses and providers. The table to the right identifies the number of registered providers across the regulators. However responsibilities can be broadly separated by providers who deliver courses throughout Australia and those who deliver courses delivered in Victoria only. Exception being that to international students (other than those enrolled in schools or undertaking school sector courses) in Victoria, VET courses outside Victoria, including VET delivered online or by distance education, English Language Intensive Courses for Overseas Students (ELICOS) and Foundation Studies courses (other than courses delivered by schools).

Multiple Service Offerings

The table below identifies that a number of registered providers are offering services across multiple disciplines. There is an opportunity to expand the use of assets outside of primary use functions and increase asset utilisation. There are examples of this that occur already with TAFE assets being utilised by RTOs to deliver courses but there is significant room for growth within the sector.

<table>
<thead>
<tr>
<th>Awarding Body</th>
<th>ESOS - International Students</th>
<th>OSSEO - Exchange Students</th>
<th>School - Government</th>
<th>School - Non Government</th>
<th>Senior Secondary Provider</th>
<th>VET - Registered Training Organisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awarding Body</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>ESOS - International Students</td>
<td>0</td>
<td>101</td>
<td>2</td>
<td>0</td>
<td>66</td>
<td>16</td>
</tr>
<tr>
<td>OSSEO - Exchange Students</td>
<td>0</td>
<td>2</td>
<td>27</td>
<td>9</td>
<td>6</td>
<td>14</td>
</tr>
<tr>
<td>School - Government</td>
<td>0</td>
<td>0</td>
<td>9</td>
<td>1540</td>
<td>0</td>
<td>345</td>
</tr>
<tr>
<td>School - Non Government</td>
<td>0</td>
<td>96</td>
<td>6</td>
<td>696</td>
<td>238</td>
<td>30</td>
</tr>
<tr>
<td>Senior Secondary Provider</td>
<td>0</td>
<td>97</td>
<td>14</td>
<td>345</td>
<td>238</td>
<td>630</td>
</tr>
<tr>
<td>VET - Registered Training Organisation</td>
<td>0</td>
<td>16</td>
<td>1</td>
<td>27</td>
<td>30</td>
<td>71</td>
</tr>
</tbody>
</table>

Victorian Higher Education Providers 2013

Registered Training Organisations (RTOs) Regulation Status by authority

- Universities
- Non-University Higher Education Provider

2015 Statistics Report On TEQSA Registered Higher Education Providers

ASQA: 3005
VRQA: 288
Total: 3293
Current: 142
Non-Current: 29
Current (Re-registration pending): 1
Cancelled: 358
Current (Suspended): 3

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Infrastructure condition
6. Annual operating and maintenance expenditure

Sector wide underinvestment in maintenance, below industry benchmarks

Private Providers Information

Information from providers not managed by Governmental Departments is generally not publically available. The information available is often disparate and does not allow for a measurable assessment across the sector. The publically available information has been presented in the tables and figures below.

TAFE Expenditure: 2014 Financial Year

| Source: Victorian Auditor-General’s Office 2015 |

| Government recurrent expenditure per student on government schools, 2012-13 ($ per FTE student) |

Source: ABS (2014) Schools Australia 2014, Cat, no 4221.0; Education Council NSSC; table 4A.14

| TAFE Expenditure: 2014 Financial Year |

Source: Victorian Auditor-General’s Office 2015

| 32% | 60% | 2% |

| Employee benefits |
| Repairs and Maintenance |
| Depreciation |
| Other expenditure including impairment |

| Data gap |

| Operating expenses $7,927.7m |
| Maintenance budget in 2015-2016, $99.4m |

| Victoria has the lowest recurrent expenditure per student in Australia (2012-13) |

| Government & Private (Student fees & charges) |

| Data gap |

| Total |

Source: Victorian Auditor-General’s Office 2015

Deloitte Touche Tohmatsu © 2016 - Infrastructure Capability Assessments
6. Annual operating and maintenance expenditure

Schools: Government

Maintenance Funding

School led maintenance activities are funded via the Student Resource Package (SRP) and includes building, grounds, reactive and planned maintenance, inspections and servicing of equipment.

DET led maintenance works are managed and delivered by the Infrastructure and Sustainability Division (ISD) consisting of targeted maintenance programs for reactive and planned maintenance works across land, permanent and relocatable buildings.

Reinstatement re-establishes a safe working environment at school buildings that have been rendered unsafe as a consequence of fire, flood, and storm events, or other similar incidents. This programs reactive nature means there are significant fluctuations in the annual budget.

<table>
<thead>
<tr>
<th>Category</th>
<th>2011-12 ($)</th>
<th>2012-13 ($)</th>
<th>2013-14 ($)</th>
<th>2014-15 ($)</th>
<th>2015-16 ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>School Led - SRP</td>
<td>56,607,331</td>
<td>58,143,015</td>
<td>59,238,295</td>
<td>60,311,032</td>
<td>N/A</td>
</tr>
<tr>
<td>DET Led</td>
<td>34,408,800</td>
<td>34,591,400</td>
<td>37,476,002</td>
<td>37,241,002</td>
<td>N/A</td>
</tr>
<tr>
<td>Maintenance Base Total</td>
<td>91,016,131</td>
<td>92,734,415</td>
<td>96,714,297</td>
<td>97,552,034</td>
<td>~$100,000,000</td>
</tr>
<tr>
<td>Reinstatement</td>
<td>6,783,000</td>
<td>3,275,500</td>
<td>5,544,580</td>
<td>5,343,751</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Source: DET

Investment Funding

In addition to the maintenance funding above the table below outlines capital investment since 2007-08. The table highlights the significant drop in school capital investment between 2010-11 and 2013-14.

<table>
<thead>
<tr>
<th>Budget Year</th>
<th>School upgrades ($m)</th>
<th>New Schools ($m)</th>
<th>Other ($m)¹</th>
<th>TEI ($m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007-08²</td>
<td>470.2</td>
<td>50.0</td>
<td>35.0</td>
<td>555.2</td>
</tr>
<tr>
<td>2008-09</td>
<td>339.5</td>
<td>200.3</td>
<td>56.0</td>
<td>595.8</td>
</tr>
<tr>
<td>2009-10³</td>
<td>483.2</td>
<td>26.5</td>
<td>50.0</td>
<td>559.7</td>
</tr>
<tr>
<td>2010-11⁴</td>
<td>346.0</td>
<td>34.0</td>
<td>8.0</td>
<td>388.0</td>
</tr>
<tr>
<td>2011-12</td>
<td>110.7</td>
<td>61.5</td>
<td>38.8</td>
<td>208.0</td>
</tr>
<tr>
<td>2012-13</td>
<td>155.1</td>
<td>10.0</td>
<td>34.9</td>
<td>200.0</td>
</tr>
<tr>
<td>2013-14</td>
<td>119.1</td>
<td>56.0</td>
<td>27.9</td>
<td>203.0</td>
</tr>
<tr>
<td>2014-15⁵</td>
<td>216.7</td>
<td>255.7</td>
<td>27.6</td>
<td>500.0</td>
</tr>
<tr>
<td>2015-16</td>
<td>344.6</td>
<td>111.1</td>
<td>111.8</td>
<td>567.5</td>
</tr>
</tbody>
</table>

Notes:
1 Other includes funding for land acquisitions, relocatable classroom program, asbestos removal, tech schools and planning.
2 Includes Ultranet funding of $60.5M and Computer Access of $7M.
3 Includes $146.4 million for Trade Training Centres
4 Includes $47.5 million in funding to respond to bushfires - listed under school upgrades.
5 Additional funding of $32.2 million was also approved in Budget Update for the inclusion of 2 more new schools in the New Schools PPP, if included, this takes the 2014-15 capital expenditure to $532 million.

Source: DET
6. Annual operating and maintenance expenditure

Higher Education

- Funding from federal government remains highly uncertain with proposed industry reforms. If the previously proposed reforms to deregulate the industry are to proceed it would have a significant implication on both revenue and cost structures of Australian universities.

- Employee expenses account for more than 50% of the expenses for all universities in Victoria. This could change with the growth of online delivery models.

- Across Australia, the industry is expected to achieve a combined surplus of 7.8% (before interest and tax). This is expected to change with the federal governments budgetary constraints putting downward pressure on surplus margins.

- Massive Open Online Courses (MOOCs) have the potential to significantly change the operating structure of universities in the future. Depending on the level to which individual universities engage in providing online learning methods, it would be expected that there would less capital dedicated (proportionally) to staff expenses for teaching (as the industry would become less labour intensive) and less repair and maintenance.

- A significant source of income for universities is from scholarships and research grants.
7. Aging Infrastructure and substantial maintenance backlogs

Aging Assets

Although the age of a building cannot be used as an absolute measure of infrastructure condition, it does highlight a requirement to apply an asset life-cycle approach to maintenance and renewals funding at a facility level. This approach to funding distribution is particularly difficult when applied at a portfolio level, which attributes to the current industry approach of “percentage of ARV”.

Older facilities across the sector, particularly, Universities and schools, have much older buildings within their asset portfolios. These assets are now likely to require significant structural refurbishment (current industry standard is to design structures for a 100 year life), which would be over and above the expected maintenance requirements for new facilities. Poor asset management practices, due to the governance complexities across the sector, and inadequate funding levels to service aging infrastructure contribute significantly to maintenance backlogs.

Higher Education

Maintenance Backlogs

The Bradley Review was initiated by the Federal Government in 2008 to report on the future of the higher education industry. A submission from Universities Australia highlights the growing maintenance backlog with the higher education sub-sector and noted the following:

• The Tertiary Education Facilities Management Association estimates that Australasian universities spend $1.5 billion each year on construction and maintenance alone
• The Group of Eight universities estimates that, within that group alone, there is now an urgent infrastructure maintenance backlog of $1-1.5 billion dollars and that a third of university buildings are in a poor or critical condition
• While the Education Investment Fund (EIF) will go some way towards addressing the maintenance backlog in universities, and to meeting new capital needs, there is a danger that, as the EIF will be open to applications for teaching facilities and also to applications from the VET sector and research institutes, the actual funds available for research infrastructure will not be large in annual funding.

In addition, VAGO identified in the Universities: 2014 Audit Snapshot that the capital replacement indicator results for all eight Victorian public universities have fallen significantly over the past five years with universities spending less on their assets. Over time, the cumulative effect of underspending on asset renewal and new assets could result in some assets not being fit for purpose, or in increased maintenance costs.

New Assets

In many cases, given the growth in the sector, there is significant investment occurring in the development of new facilities across most of Victoria’s universities. In many cases, the buildings are quite iconic and built to standards that are above and beyond best-practices. Although it is important to ensure that buildings are built to a good standard, there appears to be a trend of over spending on new facilities at the expense of investing in maintenance and repairs. Although the evidence is relatively anecdotal, government funding for new projects should be balanced against the immediate need for asset maintenance. This will ensure that the asset portfolio as a whole performs better as well as ensuring all new buildings are properly maintained in the future.
7. Government school condition requires substantial investment to bring all facilities to an acceptable standard

Schools: Government - 2012 Condition Audit

A condition assessment audit was undertaken between November 2011 and July 2012. The audit assessed 27,000 core school buildings across 1,539 government primary and secondary schools.

The audit identified 4293 buildings and site infrastructure that rated below the required standard (threshold of 3.25). Of these, 3100 required funding for upgrades. The remaining 1193 buildings were either excess to entitlement (that is, in excess of the space required to meet student enrolment levels as per the ‘entitlement schedules’) or plans were already in place to address the issue at the time of the audit. Buildings that were rated below 2.0 and in excess of entitlement were earmarked for demolition to save money on unnecessary maintenance.

The audit identified the following conditions of the sector:

- 74 per cent of government school buildings are above the appropriate threshold
- 67 per cent of school buildings are in good or excellent condition
- 26 per cent of buildings were below the appropriate threshold and are in need of additional maintenance funding.

Following the 2012 condition audit, in 2013 Victorian Auditor-General’s Report identified that DET (DEECD) had consistently underfunded schools to maintain their buildings, leading to the situation that 2,042 buildings across 505 schools being at the point of failure, or having already failed. An additional $420 million was required to bring all school buildings up to an acceptable, evidence-based, standard.

Response to the Audit

As an immediate response to the most urgent maintenance issues, $147 million was provided to 364 schools in 2013-14 and 2014-15 for the replacement or repair of 1,475 buildings. State Budgets since the condition assessment audit was undertaken have provided $680.4 million in capital works, $110.5 million in funding for DET-led maintenance projects and $181 million for SRP maintenance and grounds allowance. This funding has assisted in responding to the maintenance backlog.

Current Status

There are still 391 schools with facilities below the threshold and needing extra funds to bring them above the threshold. Although this represents a significant reduction since 2012, individual buildings rated below the threshold remain in approximately one quarter of all Victorian Government schools. There remains a maintenance backlog of approximately $270 million.

The Government expenditure on school maintenance programs for 2015-2016 is anticipated to total approximately $100 million.

The 2015-16 Budget delivered an additional $325 million for projects at existing schools, which will assist in further reducing the maintenance backlog.

Independent Schools Victoria and the Catholic Education Commission were approached but were unable to provide information for this assessment. In any event DET schools and Independent/Catholic Schools are not assessed on the same basis which make comparisons difficult.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Assessment rating range</th>
<th>Number of buildings/site infrastructure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>1.00–1.50</td>
<td>69</td>
</tr>
<tr>
<td>Worn</td>
<td>1.51–2.50</td>
<td>1209</td>
</tr>
<tr>
<td>Fair — below threshold</td>
<td>2.51–3.24</td>
<td>3015</td>
</tr>
<tr>
<td>Fair — above threshold</td>
<td>3.25–3.50</td>
<td>1293</td>
</tr>
<tr>
<td>Good</td>
<td>3.51–4.50</td>
<td>8445</td>
</tr>
<tr>
<td>Excellent</td>
<td>4.51–5.00</td>
<td>1053</td>
</tr>
</tbody>
</table>

Source: 2012 Condition Audit
7. The National Quality Standards identified that the majority of Victoria’s ECEC services are meeting expected standards for Physical Quality. The TAFE sector has approximately 1/3 poor, 1/3 fair and 1/3 good in terms of asset quality.

**Early Education**

The ACECQS National Quality Standard (NQS) contains a Physical Quality rating which measures:

*The Quality Area Physical environment focuses on the physical environment at an education and care service. The environment must be safe, suitable and provide a rich and diverse range of experiences promoting children’s learning and development.*

This rating tool identified that 76% of 4012 registered facilities are meeting or exceeding the national quality standard.

**TAFE**

DET advised that sector underspends on maintenance against industry standards with one or two exceptions. Funding cuts have significantly impacted the sectors ability to master plan and maintenance is one area that has suffered as a result. Backlog is at $195m and annual spend is around $17 m. The average is just over 1% of building value.

DET advised that the condition of TAFE assets was approximately 1/3 good, 1/3 fair and a 1/3 poor. Accurate data does not currently exist but plans are in place to improve the situation.

**ACECQS Physical Environment Rating (Victoria)**

- Exceeding NQS
- Meeting NQS
- Provisional – Not Yet Assessed
- Working Towards NQS

**ACECQS Physical Environment Rating Australia (2015)**

- Exceeding NQS
- Meeting NQS
- Provisional – Not Yet Assessed
- Significant Improvement Required
- Working Towards NQS

Source: Department of Education
7. Physical Condition & fit for purpose of the Education & Training Sector overall is satisfactory in the short-term.

Methodology

Condition assessment ratings have been determined through assessing the following criteria:

- **Physical Condition** – considers the general condition of assets in the network, likely life remaining in the assets and required investment to maintain full functionality
- **Fit for purpose** – considers whether the infrastructure meets the required service needs of the network, measuring against industry best practices.

The assessment includes consideration of network improvements currently being planned and implemented.

Ratings were assigned to sub-sectors from 1 to 5 where:

- 1 is poor condition insufficient to meet current demands and user requirements. Assets are prone to failure and have a maintenance budget that far exceeds the allocated PPM.
- 5 is superior condition sufficient to be suitable for future demands and user requirements for the following 30 years.

The sector score is the average of all sub-sectors.

Government School Education

- At a state-level, it is estimated that within 5 years the demand for schools will exceed the permanent building supply. However the relocatable buildings policy allows for state-wide supply of buildings until 2030. A state-wide estimate does not account for localised demand or “school of choice” legislation and Government policy. A state-wide measurement of demand and supply, does not illustrate that there is excess space in the sector, supporting VAGO’s findings but DET has more detailed models and tools which can be used to predict localised demand requirements.
- A condition assessment conducted in 2011-12 identified 3100 school buildings requiring a total of $420 million dollars in maintenance works, to bring the assets up to compliance with the Building Act.
- The school building portfolio is currently 33 per cent surplus to requirements. This is a reduction on the 38 per cent surplus reported by VAGO in 2013. Prior to VSP and BER programs, the level of excess space was approximately 15 per cent, indicating that these programs have more than doubled the amount of surplus space in Victorian Government schools. One objective of VSP was to consolidate school buildings in order to address inefficiencies associated with surplus space.

Early Childhood

- The ACECQS National Quality Standard (NQS) identified that 76% of registered facilities were either above or meeting the standard. Less than 10% of the facilities were identified as not meeting the standard or working towards compliance.
- The 4,012 registered providers have 217,229 approved places (ACECQS).

TAFE

- Due to TAFE funding cuts and a shift in the market from public operators to private operators, there is generally an over supply within the TAFE network (with some exceptions).
- Employers are now demanding people with higher levels of education. This has resulted in a significant increase in people requiring a Certificate III or above which has impacted the assets ability to deliver the required service levels.
- The condition of the TAFE assets is highly varied with approximately a third of the assets in good condition, a third in fair condition and a third in poor condition.
- There is currently $195 million dollars in backlog maintenance across the 12 state TAFEs and 4 dual sector universities.

Universities

- Victorian universities are arguably rated amongst the best in Australia and comparable to some of the best universities in the world. This has led to the sector becoming a net exporter of services generating several hundred million dollars of revenue per annum.
- Assets are generally built to best practice standards at the time of construction, but given the wide range in asset age (some dating back to more than 150 years), there is a large maintenance backlog and in some cases the assets are not fit for purpose.
8. Substantial investment in maintenance and renewal is required to bring the sector up to standard

Schools: Government

The 2013 Victorian Auditor-General’s Report identified that the Government has consistently underfunded schools to maintain their buildings. A 2012 condition assessment identified 2,042 buildings across 505 schools being at the point of failure, or having already failed. An additional $420 million was required to bring all school buildings up to an acceptable condition.

Early Childhood

Approximately 26% of the 4,000 approximate facilities do not meet the expected standards. Due to the diverse ownership of the assets (non-centralised) availability of data is limited and an estimate to address the maintenance backlog in the sub-sector is unknown.

TAFE

The current maintenance backlogs for TAFEs ($134m) and Dual Sector Universities ($61m) is $195m (DET).

Universities

In 2008 the Tertiary Education Facilities Management Association estimates that Australasian universities had a back log of $1 – 1.5 billion. Given the prevailing economic conditions since the report it is estimated that the backlog maintenance for Victorian universities is now around $1 billion dollars.

![Investment required by sub-sector](chart)

- **Schools - Government**: $0
- **TAFE**: $134m
- **Higher Education**: $61m

- **Backlog Maintenance**
- **Good Condition**
Higher Education

- All maintenance spend was determined from the relevant universities’ 2014 income statements (maintenance and repair expenses). This only accounts for items that have been expensed and does not capture any asset renewal that were capitalised. It is expected that the accounting treatment for all universities will be consistent therefore it should provide a benchmark for comparison purposes.
- Age of universities was determined from the university websites. It refers to when the university was first founded which provides a basis for assessing the variation in the age of the assets.
- Gross floor area was determined from a Tertiary Education Management Conference (TEFMA) paper (QUT – Maximising Value and Minimising costs) which provides an outline of floor areas for all universities in Australia.

These graphs demonstrate significant variability in spending largely due to the individualised approach to asset management of the universities. High level standards documents in the form of guidelines are available from the Commonwealth and industry associations, but these are not binding and each University makes its decision on funding allocations independently.
Higher Education

The university sector spent approximately $203 million dollars on asset maintenance and repairs in Victoria. The level of expenditure is generally consistent with industry averages across Australia however the following observations can be made.

- Based off the reported maintenance and repair expenditure for 2014, both Deakin University and Federation University have spent approximately twice the industry norm. Both of these universities have assets which are typically newer assets and are expected to be in generally better condition than Victoria’s other universities.
- La Trobe University appears to rent/lease a significant portion of its space leading to significant reductions in maintenance and repairs expenditure.
- There appears to be very little to no correlation between the age of the university and the level of maintenance and repair spend. This is not consistent with what would typically be expected with best practice asset management principals.*

<table>
<thead>
<tr>
<th>University</th>
<th>Maintenance Spend (,000)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federation University</td>
<td>$ 12,068.00</td>
</tr>
<tr>
<td>Swinburne</td>
<td>$ 12,718.00</td>
</tr>
<tr>
<td>Victoria University</td>
<td>$ 14,957.00</td>
</tr>
<tr>
<td>La Trobe University</td>
<td>$ 10,527.00</td>
</tr>
<tr>
<td>Deakin University</td>
<td>$ 47,271.00</td>
</tr>
<tr>
<td>RMIT</td>
<td>$ 21,058.00</td>
</tr>
<tr>
<td>University of Melbourne</td>
<td>$ 42,856.00</td>
</tr>
</tbody>
</table>

*Maintenance and repair expenditure (as per 2014 annual reports). Does not include capital expenditure associated with asset renewal.

*From this we can not infer that all assets within an older university are aged, but we can expect there to be a higher level of variance within the asset portfolio.
9. Government Schools - Maintenance Standards & Programs

**Historic underfunding and funding uncertainty**

Unprecedented population growth and sustained overcrowding in Government schools has been met by under-investment in school infrastructure.

Between 2007-08 and 2010-11, approximately $520 million a year was invested in school infrastructure.

Between the 2011-12 and 2013-14 State Budgets, funding dropped to around $200 million per year. The implications of this recent underfunding are significant. Since 2012 only nine mainstream schools have opened, and no new schools are scheduled to open in 2016. During the 2014-15 and the 2015-16 budgets have seen a significant increase in new school funding this investment will only partially alleviate urgent demand.

Furthermore, a lack of funding certainty limits DET's ability to implement long-term planning, achieve efficiency and value for money, and provide surety to communities.

DET plans for new government school infrastructure through the regular monitoring of residential growth, demographic change and enrolment trends across Victoria. The key aim of DET's school provision process is to ensure that each government school has sufficient capacity to accommodate every government school student that currently lives, and is expected to live, in its local neighbourhood.

A key challenge in school provision planning is that the current provision annual capital funding makes it difficult to strategically plan for growth and to engage productively with schools and community in infrastructure planning.

This lack of certainty means that DET are unable to commit to a forward plan of site acquisitions. This has caused frustration and concern for a range of stakeholders including local residents, council and land owners. There have been recent examples of land holders suing local councils for compensation for land reserved for government education use.

**Asset management standards**

In response to the VAGO (2013) findings and the PWC report on Best Practice Asset Management and Investment (2012) the following key themes were identified:

- Deliver a high-quality and safe asset base
- Deliver an asset base that meets demand and respond to need
- Maximise opportunities at the local level to respond to community needs
- Improve accountability and enhance capability of asset managers
- Maximise long-term sustainability and value for money and leverage investments
- Ensure consistent and evidence-based decision-making across the asset life cycle and across sectors.

**Maintenance Programs**

**Student Resource Package — maintenance component**

In line with the system of devolved responsibility, the majority of maintenance funding is allocated directly to schools as a component of the Student Resource Package (SRP).

**Planned Maintenance Program**

DET undertakes an annual Planned Maintenance Program (PMP) for maintenance works in schools, which is in addition to school maintenance funding provided through the SRP. Planned maintenance is allocated according to need, based on schools’ condition, according to the 2012 condition assessment. Schools selected for funding under this program are those with buildings in the worst condition.

**Emergency Maintenance Program**

Some maintenance issues and damage cannot be rectified using regular school maintenance funding streams. Often, this is because of emergencies; occasionally it is because of inadequate preventative maintenance.

**Compliance Programs**

DET has a suite of compliance programs to assess whether certain elements of school infrastructure meets relevant standards, regulations and guidelines. These are:

- Hydraulic Fire Safety Systems program
- Prevention of Falls program
- Underground Petroleum Storage Systems program.

**Other centrally managed maintenance programs**

DET has other centrally-managed maintenance programs, which includes maintenance for relocatable buildings being transferred, school security system maintenance and maintenance systems support.

DET allocates approximately $2.2 million annually to fund maintenance on relocatable buildings being transferred. This funding is not given to schools, it is used to refurbish relocatable facilities that are being moved to a new school to ensure that they are fit for use.
9. Maintenance standards

**Education and Training Sector**

Maintenance standards across the sector are fragmented due to the ownership and operating models, as well as funding levels and certainty. A number of operators, such as DET and Universities, have design standard documentation which details construction and maintenance requirements for assets. The design standards typically represent the operators unique requirements, industry best practices and relevant associations knowledge at time of writing. However the design standards are typically infrequently updated which leads to outdated practices being used in some new assets.

**Schools: Government**

**Building Quality Standards Handbook (BQSH)**

DET has developed a considerable body of experience from a range of delivered and subsequently evaluated school building projects. The purpose of the Building Quality Standards Handbook (BQSH) is to provide those involved in the design of schools with the benefit of this experience, thereby enabling demonstrated best practice to be incorporated into new projects.

The Handbook sets the minimum quality criteria for all DET projects, including new construction and refurbishment. It has been developed to provide a consistent approach to the development of school facilities across Victoria. It is not intended to be a comprehensive guide to all aspects of a project.

*While the Handbook describes the standard elements of a building project, it is not prescriptive in its approach, and planners are encouraged to exercise their creativity within available budgets and the minimum benchmarks outlined. Similarly, materials and building practices detailed are not exhaustive, and those not covered in this document should be assessed in relation to those included. An alternative material or building practice should only be considered where it provides, without compromise, a more cost-effective solution. All design, materials, workmanship, testing and commissioning shall comply with the latest revision of the BCA and relevant standards and legislation (BQSH) 2011.***

**Capital Works Program Procedures Manual (2010)**

The Capital Works Program Procedures Manual (2010) includes the Building Quality Standards Handbook as a reference for the master planning, schematic design, design development and tender documentation phases of a project. Principal consultants are to “ensure that design and documentation conform with requirements of the Department’s Building Quality Standards Handbook and all relevant Australian Standards.” (BQSH) 2011)

**Asset Management Planning: Operational Manual For Victorian government schools**

Asset management and investment needs to be responsive to emerging trends and developments in pedagogy. Evidence suggests that access to 21st century facilities that reflect contemporary knowledge about effective teaching and learning will help support improved outcomes. Studies in the United States have found higher literacy and numeracy achievement in school students who learn in new facilities relative to those in older school buildings (Fisher, 2007).

A key component of the delivery of a great education system is ensuring that assets foster 21st century learning, are in good condition and are managed efficiently and effectively. Ensuring all DET owned school facilities meet these objectives, and providing the asset managers of TAFE institutes and early learning centres with the skills and capabilities to effectively manage assets, will enable a greater focus on teaching and learning.

**Higher Education / TAFE / VET / Non-Government Schools / Early Childhood**

Management of maintenance and planning by non-government organisations is undertaken independently with guides and frameworks provided by industry associations. Individual organisations typically have their own design standards but these are typically not shared. Universities are a key example of extensive design standards for use on capital works projects to ensure consistency and, experience based, best practice based on the organisation objectives.

- Independent Schools Victoria (ISV)
- Tertiary Education and Facilities Maintenance Association (TEFMA)
- Independent Schools Council of Australia (ISCA)
- Catholic Education Commission of Victoria (CECV)
- Early Learning Association Australia (ELAA)
- Universities Australia (UA).
Infrastructure service performance
10. The majority of Victoria’s education facilities are operating at an acceptable standard.

**Early Childhood Education**

- The Australian Children’s Education & Care Quality Authority (ACECQA) is the national body which assess the quality of Children’s Education and Care Services in Australia. They currently use a rating tool which assesses the quality of the physical environment of child care services in Australia.
- The quality rating of physical environment focuses on the following standards:
  - The design and location of the premises is appropriate for the operation of a service – this includes whether the facility is able to meet demand and needs
  - The environment is inclusive, promotes competence, independent exploration and learning through play
  - The service takes an active role in caring for its environment and contributes to a sustainable future.
- This rating tool identified that 76% of registered facilities in Victoria are meeting or exceeding the national quality standard compared with only 53% of registered facilities in NSW meeting or exceeding the national quality standard. It also shows that 19% of registered facilities in Victoria are still working towards the national quality standards compared with 7% of registered facilities in NSW.

**Schools: Government**

- VAGO reported that the majority of government school buildings are now in satisfactory operational condition, with 67% of all buildings having been assessed in the 2011-12 School Maintenance Audit as being in good or excellent condition, requiring only routine maintenance.
- However, at the conclusion of the School Maintenance Audit, notable issues with the school building portfolio remained. Approximately 8% of buildings were at the point of imminent failure, or had already failed. A further 3,074 buildings were below the standard DET requires. It was estimated that $420 million would be required to address this failure.
- From 2012-2013 Victoria’s cost of capital per student was the third lowest in Australia. This is consistent with the Auditor General’s comments that in 2012 Government supplied schools with 32% of the recommended investment level.
- The Program for International Student Assessment’s index of the quality of school’s physical infrastructure in 2003 indicated that Australia was the top ranked in the OECD for school infrastructure.
- With high population growth rates occurring in Victoria’s growth corridors, especially in Melbourne’s western suburbs, current infrastructure is unable to meet high utilisation rates. To meet these demands, DET is using relocatable buildings, which can be moved from one site to another to accommodate enrolment fluctuations.

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**ACEQS Physical Environment Rating (2015)**

![Graph showing the ACEQS Physical Environment Rating for different states and territories in 2015.](source: Australian Children’s Education & Care Quality Authority Physical Environment Quality Area (2015))

**User cost of capital per student 2012-2013**

10. Infrastructure in non-government schools is assumed to currently be in adequate condition however, there is no public data available on the condition of capital stock to make a full assessment

**Schools: Non-Government**

- The 2011 *Review of Funding for Schooling* conducted by the Commonwealth Department of Education identified that evidence about the state of capital stock in Australian non-government schools is variable and therefore difficult to obtain.

- A 2002 survey of non-government school infrastructure in Australia found that while most facilities in non-government schools were at least adequate, additional expenditure was required for areas such as upgrading old stock, maintenance, and new construction to provide for basic and specialist facilities, as well as new schools.

- The data below shows that between 2008-2012 in Victoria $2,032 was spent per student in non-government schools on capital. This expenditure seems to be on par with QLD, NSW and WA.

---

**All non-government schools total capital expenditure per student 2008-2012**

<table>
<thead>
<tr>
<th>State</th>
<th>Dollars ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSW</td>
<td>1,652</td>
</tr>
<tr>
<td>VIC</td>
<td>2,032</td>
</tr>
<tr>
<td>QLD</td>
<td>2,139</td>
</tr>
<tr>
<td>WA</td>
<td>1,968</td>
</tr>
<tr>
<td>SA</td>
<td>1,361</td>
</tr>
<tr>
<td>Tas</td>
<td>1,232</td>
</tr>
<tr>
<td>ACT</td>
<td>2,189</td>
</tr>
<tr>
<td>NT</td>
<td>2,928</td>
</tr>
</tbody>
</table>

10. Reduced funding in both the TAFE and higher education sub-sectors has led to poor quality infrastructure and significant investment is now required to meet the current maintenance backlog

**TAFE**
- DET’s TAFE Reform Panel concluded that the TAFE sector in Victoria is currently holding a number of surplus, under-utilised and poor-condition assets
- The 2015 VET Funding Review has recommended an audit of TAFE assets to understand which are of value, underutilised or redundant
- DET advises the following in regards to TAFE infrastructure:
  - Approx. 1/3 are in good condition
  - Approx. 1/3 are in fair condition
  - Approx. 1/3 are in poor condition.
- The data below highlights the reduced funding across each state in the TAFE sector from 2009 to 2013. Due to this reduction in funding DET commented that the sector currently underspends on maintenance against industry standards. The average spend is just over 1% of building value. The reduced spending in capital may lead to poor quality infrastructure in the future. This is assumed to be relevant across all states.

**Higher Education**
- The Victorian Auditor- General’s Office (VAGO) identified in the *Universities: 2014 Audit Snapshot* that the capital replacement indicator results for all eight universities in Victoria have fallen significantly over the past five years; with universities spending less on their assets. The report comments that the reduced spending on assets could lead to poor quality infrastructure over time. The report also shows that in the 2014 financial year, only 2.7% of total University expenditure directed towards maintenance and repairs
- VAGO has recommended that universities review their asset replacement and renewal plans to ensure that spending on physical assets is sufficient to maintain service delivery
- However, over the last 10-15 years the sector has experienced huge investment especially as the Commonwealth Government has set up a number of competitive funds which have lead to some Universities to build a number of new facilities
- The data below highlights that Victoria has the third lowest spend on repairs and maintenance per student in the country at $729 with South Australia having the highest at $1,365. It is assumed that the low expenditure on maintenance could mean that infrastructure is not meeting required service delivery levels and needs significant investment to meet maintenance backlog.
11. The early childhood and school sub-sectors have well established performance frameworks to ensure that the community’s expectations are met

**Early Childhood Education**

- Child care services’ infrastructure performance targets are set by the ACEQS and the Victorian DET. The ACEQS National Quality Framework applies to most preschools (kindergartens), long day care, family day care and outside school hours care services.

- The National Quality Framework contains a Physical Quality rating which identifies that:
  - The Quality Area Physical environment should focus on the physical environment at an education and care service.
  - The environment must be safe, suitable and provide a rich and diverse range of experiences promoting children’s learning and development.

- DET also has a Funded Organisation Performance Monitoring Framework which provides a set of tools and process for monitoring organisations funded through a Service Agreement. DET monitors whether the framework is being met by a regular collection of information and engagement with funded organisations. The data from these reviews are not publicly available.

**Alignment with Community and Stakeholder Expectations**

- The ACEQS National Quality Framework was reviewed in 2014, by the Commonwealth Government, to ensure that it was meeting the community’s expectations of what constituted a robust Quality Framework. This review included consultation with over 1,700 people and 108 public written submissions. Overall feedback was generally supportive of the NQF and the increase in quality service provision since its implementation.

**Schools: Government**

- In accordance with the Victorian Registration & Qualification Authority, a school’s buildings, facilities and grounds must comply with any laws that apply to the school including local laws and building, planning and occupational health and safety laws.

- DET also ensures that schools are meeting requirements for quality facilities by providing funding for maintenance on facilities. In 2012, DET conducted a Maintenance Audit of all Victorian Government schools, which aimed to provide better direction for maintenance funding for schools.

- To further ensure the ongoing quality of infrastructure, the principal of each government school is accountable for maintaining all school facilities and must:
  - arrange annual building/site inspections
  - maintain buildings (internally and externally) so that they meet occupational health and safety requirements
  - deal with urgent repairs
  - maintain all essential services
  - manage the school’s maintenance requirements within an annually defined budget.

**Alignment with Community and Stakeholder Expectations**

- DET, as the school provider, monitors and conducts School Maintenance Audits to ensure that infrastructure is meeting DET’s expectations and requirements.

- By prioritising funding and doing regular audits, DET aims to ensure that schools are able to provide students with high quality facilities, which align with the community’s expectations.

- Both government and non-government schools are required to report on parent, teacher and student satisfaction in their annual reports. A national school opinion survey was developed, which allows parents and students to provide feedback on their school. This includes questions on whether the school is well maintained. The provision of this feedback mechanism insists in ensuring that schools are meeting the community’s expectations.

**Schools: Non-Government**

- Data in regards to non-government school’s infrastructure is difficult to obtain, as it is stored with the Independent Schools Victoria Association and the Catholic Education Melbourne. It is not publicly available.

Source:
- DET website
- ACEQS website
- Commonwealth
- Deloitte Access Economics

Source:
- DET website
- Independent Schools Victoria website
- My school website
11. The higher education and VET systems are regulated by State and Commonwealth Government regulation and, when requested, are required to provide information to demonstrate that assets are fit for purpose

Higher Education

- The Tertiary Education Quality and Standards Agency (TESQA) is responsible for setting the infrastructure performance targets for higher education in Australia and evaluates performance of providers against the Higher Education Framework.
- According to the Higher Education Standards Framework 2015, facilities, including facilities where external placements are undertaken, must be fit for their educational and research purposes and accommodate the numbers and educational and research activities of the students and staff who use them.
- Tertiary Education Facilities Management Association (TEFMA) set the Facility Condition Index which provides infrastructure service levels for Universities.

<table>
<thead>
<tr>
<th>Condition Status</th>
<th>General Description</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>Asset has no defects; condition and appearance are as new.</td>
<td>5</td>
</tr>
<tr>
<td>Good</td>
<td>Asset exhibits superficial wear and tear, minor defects, minor signs of deterioration to surface finishes; but does not require major maintenance; no major defects exist.</td>
<td>4</td>
</tr>
<tr>
<td>Fair</td>
<td>Asset is in average condition; deteriorated surfaces require attention; services are functional, but require attention; backlog maintenance work exists.</td>
<td>3</td>
</tr>
<tr>
<td>Poor</td>
<td>Asset has deteriorated badly; serious structural problems; general appearance is poor with eroded protective coatings; elements are defective, services are frequently failing; and a significant number of major defects exist.</td>
<td>2</td>
</tr>
<tr>
<td>Very Poor</td>
<td>Asset has failed; is not operational and is unfit for occupancy or normal use.</td>
<td>1</td>
</tr>
</tbody>
</table>

Alignment with Community and Stakeholder Expectations

- TESQA requires providers to submit asset management plans that detail the condition of their infrastructure, to assist in ensuring that assets align with stakeholders' expectations.
- Various higher education rankings, which look at a number of standards including teaching, research, citation, international outlook and industry income, provide a broad indicator of a university's service performance. These rankings are widely used by students when determining which university to attend, and hence can be seen as an indicator of the community's expectations of its higher education sub-sector.

Source:
- Group of Eight TEFMA Infrastructure Survey (2011)
- Commonwealth Department of Education and Training Website (2015)
- RMIT Asset Management Plan (2011-2018)
- Times Higher Education World University Rankings

VET/TAFEs

- TAFE Institute's performance targets and service levels in Victoria are set in the Education and Training Reform Regulations 2007. Which states that ‘A school's buildings, facilities and grounds must comply with any laws that apply to the school including local laws and building, planning and occupational health and safety laws.’
- Also in accordance with the Audit guidelines outlined in the Education and Training Reform Act 2006, the Board of a TAFE Institute must prepare and keep up to date an Asset Management Plan. The Asset Management Plan includes an assessment of the current condition status of all buildings using the service levels set by TEFMA. TAFEs must keep this report up to date and supply a copy to parliament when requested.

RTOs

- Service levels for infrastructure are set under standard 1.3(d) of the Standards for Registered Training Organisations, which details that an RTO should have for all its scope of registration and consistent with its training and assessment strategies, sufficient facilities, whether physical or virtual and equipment to accommodate and support the number of learners undertaking the training and assessment.
- The Australian Skills Quality Authority (ASQA) also conducts registration audits to ensure RTOs are meeting service level targets. Under a compliance audit, investigators will look into the suitability of facilities and equipment.
- To ensure performance targets are being met Victorian Registration & Qualifications Authority (VRQA) requires RTOs to provide evidence from appropriate authorities that all educational facilities meet the appropriate building, fire safety, OH&S, and other codes for educational premises including relevant Class 9B certificates.

Alignment with Community and Stakeholder Expectations

- The main stakeholders for TAFEs and RTOs is DET, VRQA and ASQA. All have relevant frameworks and regular audits to ensure alignment of expectations.
- Data which indicates how the VET sector performs against community expectations is currently unavailable. However, DET is currently undertaking to build the quality of the sector’s service provision, indicating that current services may not meet the expectations of industry and students.

Source:
- ASQA website
- VRQA website
- Education and Training Reform Regulations 2007
- Education and Training Reform Act 2006
- TAFE Institutes Strategic Guidelines (2006)
12. Supporting ICT infrastructure

ICT infrastructure within each of the sub-sectors (ECE, school and higher education) are generally well provided. Local, site based solutions can be readily deployed using available technologies (e.g. wireless solutions) with appropriate backbone infrastructure networks available. The critical issue for the sector is that ICT forms an essential component of on-going service delivery. The sector is a large consumer of end-user computing as learning aids and virtual learning environments are critical in responding to opportunities presented by digital disruption. Key elements of the supporting ICT infrastructure are outlined below:

<table>
<thead>
<tr>
<th>Early Childhood</th>
<th>Schools</th>
<th>VET and Higher Education</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Kindergarten Funding &amp; Reporting</strong></td>
<td><strong>School Administration</strong></td>
<td><strong>Student Management</strong></td>
</tr>
<tr>
<td>The Kindergarten Information Management system is a new online web-based system for kindergarten funding applications, data collection, and reporting. The system is critical infrastructure because in order to receive ongoing kindergarten funding, service providers are required by DET to provide up-to-date information. KIM is used by funded service providers to:</td>
<td>Computerised Administrative System Environment in Schools (CASES) is an ICT infrastructure package for Victorian government schools to support administration, finance and central reporting. It is supported by DET with a training program, documentation, service desk and support staff. The CASES21 software component is a customised version of the Maze school software system. The software is updated regularly to meet changing business &amp; reporting needs.</td>
<td>Student Management Systems (SMS) are the core system for any VET or HE provider. They record admissions and enrolments, calculate fees, and provide legislated reporting. A number of providers have recently updated systems, however the market is moving towards cloud-based systems and a number of HE providers will need to replace their systems in the next 5 years.</td>
</tr>
<tr>
<td>• apply for kindergarten funding for children in the year prior to school</td>
<td><strong>Student Assessment</strong></td>
<td><strong>Learning Management</strong></td>
</tr>
<tr>
<td>• apply for Early Start Kindergarten funding</td>
<td>NAPLAN supports improvements in the K12 education sector and allows fine tuning of the sector. Current NAPLAN assessment is costly, time consuming and resource intensive. The Federal Government is funding the delivery of NAPLAN online, which will be significantly less resource intensive and time consuming. Victorian Assessment Software System (VASS) is a web-based system used by all VCE, VCAL and VET in Schools providers to enrol students and record results. This is an aging system and will be replaced with the Insight platform in the next year.</td>
<td>Online Learning Management Systems (LMS) are key to the provision of online learning for students in both VET and HE, with traditional face-to-face delivery being disrupted by fully online courses and mixed mode delivery. Moodle is the preferred platform for the sector and is well supported.</td>
</tr>
<tr>
<td>• Apply for Kindergarten Cluster Management funding</td>
<td><strong>Learning Management</strong></td>
<td><strong>Australia’s Academic and Research Network (AARNet)</strong></td>
</tr>
<tr>
<td>• submit declarations of eligibility for a second year of funded kindergarten</td>
<td>Online Learning Management Systems (LMS) are key to the provision of online learning for Victorian students provided with digital learning opportunities. Currently each school is responsible for providing their own LMS and learning portals. In the next 5 years these will be more critical to schools as education continues to be digitally disrupted.</td>
<td>Is a national resource – a National Research and Education Network (NREN). AARNet provides unique information communications technology capabilities to enable Australian education and research institutions to collaborate with each other and their international peer communities. AARNet is widely regarded as the founder of the Internet in Australia and renowned as the architect, builder and operator of world-class network infrastructure for research and education.</td>
</tr>
<tr>
<td>• commence, re-commence and cease funding to a service</td>
<td><strong>End-user Computing for Teaching &amp; Learning</strong></td>
<td></td>
</tr>
<tr>
<td>• complete mandatory data collection processes</td>
<td>Schools are large consumers of end user computing devices that are critical aids used for classroom teaching delivery and individual learning. These devices include desktop and laptop computers, tablets and interactive whiteboards.</td>
<td></td>
</tr>
<tr>
<td>• update service or service provider details</td>
<td><strong>Internet connectivity</strong></td>
<td></td>
</tr>
<tr>
<td><strong>ACECQA Online System (NQA ITS)</strong></td>
<td>The VicSmart network provides Internet connectivity to all government schools. The network is sourced from Vic Government’s whole-of-government single-source provider and is critical for schools both for learning &amp; administration activities.</td>
<td></td>
</tr>
<tr>
<td>The National Quality Agenda IT System (NQA ITS) is a useful online tool for educators and providers. It provides online business applications to work with state and territory regulatory authorities. Registered users of the NQA ITS can view provider and service details, submit applications and notifications and pay invoices related to their provider, service and certified supervisor approvals.</td>
<td><strong>Central ICT Services</strong></td>
<td></td>
</tr>
<tr>
<td><strong>School Administration</strong></td>
<td></td>
<td>DET ICT team provides a number of ICT services to schools including eduGate, eduMail, eduPass, eduPay, eduSTAR and technical ICT support services. These services are essential to the smooth running of schools across the state.</td>
</tr>
</tbody>
</table>
Operational criticality and resilience
Methodology
The operational criticality assessment is measured using two key drivers – the frequency and the impact and should be presented in a matrix format that illustrates the relative frequency and impact of all asset sub-classes.

Frequency
Frequency refers to the probability of a network level failure that renders the serviceability of entire towns or large suburbs non-operational, as this may relate to the educational assets.

Impact
Impact refers to the impact of a network level failure. The key assessment criteria is the impact it has on the system performance, the damage it would cause, the impact it would have on public health, the impact it has on the state economy, and the level of environmental damage that the failure is likely to cause.

Findings
The Education and Training sector is a broad network, servicing a number of Victorian communities and is resilient to risk of failure. Whilst significant issues exist for localised stakeholders in the event of a failure (asset closure such as a school, ECE or even a University) the network is able to ‘flex’ to accommodate reasonable major demand changes.

Assets that are long term infrastructure investments are typically built with 50 – 100 year life cycles, the sector is generally resilient to weather events, but extreme weather events (i.e. significant earthquake), whilst improbable would likely have a critical impact.

Schools: Government
Incidents are likely to be localised and caused by non-infrastructure related events (bushfires, teacher shortage).
Examples of DET’s ability to respond to demand are:
- Provide relocatable buildings to increase capacity in the short (and long) term
- Relocate students to other schools.

Early Childhood
As demonstrated by ABC Learnings collapse in 2008 and subsequent purchase by Goodstart Childcare in 2009 the network was able to respond to changes. However it did underscore the issues associated with government funded private organisations. The collapse was primarily due to the lack of standards and accreditation requirements on Childcare Services providers. An aggressive expansion followed due debt repayments and corresponding share price collapse. The introduction of the National Quality Framework has created greater structure, stricter accreditation requirements and transparency in the sector.

Higher Education
The higher education sub-sector is able adjust to demand in local students demand and expand operations with significant numbers of international students. In the improbable event that a University loses its accreditation, government intervention would be required to relocate students.

TAFEs
Like the other sub-sectors, the TAFE sector contains a dispersed group of assets that function independently. There is a degree of difference driven by the use of specialist equipment for training purposes and this changes the risk profile.

Interface of University Sector to Science (Research)
University research infrastructure provides an opportunity for the research and science sector to utilise in the case of disruption to their infrastructure. Whilst dedicated science facilities have different equipment/standards than university facilities, there is an opportunity for dual-utilisation of infrastructure assets in the event of localised failure to either sector. There is a high degree of collaboration between science and research facilities and universities already which assist with any use of the other sectors assets.
Infrastructure use
14. Population and International students are driving demand

**Population Growth**
Long term demand is linked to population growth. According to the latest Victoria in Future (2015) report, Victoria’s population is expected to grow to 6.6 million in 2021, and 8.3 million in 2036, reaching 9.4 million by 2046, of which approximately 2.2 million will be under the age of 19.

**International Students**
The International Education Strategy for Victoria outlines a vision for Victoria to be the ‘leading provider of international education in the Asia-Pacific region’. Recent historic declines in student visa applications can be attributed to a number of factors, including:

- changes to student visa regulations and the General Skilled Migration program, which have made the transition from international student to permanent residency more difficult
- international media attention regarding incidents of violence against international students
- the rise of the Australian dollar and increased competition from other countries in the international education market.

These factors are likely to continue to play a significant role in the variability of international student numbers in the future in all Education and Training sectors.

**Urbanisation and accessibility**
Timely supply of new schools in growth areas is a critical issue. DET has processes to identify the need for new schools, however delivery lags behind demand.

It is not known what non-government schools are planned for establishment in these areas to relieve some of the pressure.
15. A state-wide capacity assessment of Government schools does not account for localised demand

**Schools: Government – state-wide capacity**

To meet short-to-medium demand pressures in government schools DET utilises relocatable classrooms, transferring buildings state-wide and responding fluctuations in enrolment across the network.

Graph 1 uses an approximation based on historic state-wide enrolment data and extrapolates this out based on a percentage of population growth for 5 – 10 age bracket on the base year of 2015. The split of government and non-government school enrolments is assumed to remain constant.

On this basis, the graph identifies that without future investment the total permanent building capacity of government schools will be exceeded by 2018 and total capacity (including currently allocated relocatable buildings) by 2031.

**Limitations**

Localised demand and capacity analysis are critical for capital planning and do not form part of this state-wide capacity estimate of Government schools.

For example, growth areas bear much of the enrolment demand over the next 15 years. There is only a limited number of relocatable classrooms that can be transferred to each site. Likewise, capacity at existing schools may be in areas where there is moderate or low enrolment demand, meaning that portions of the ‘permanent’ capacity are not utilised in the same way that they are in the scenario that the chart sets up.
15. Schools growth projections require complex localised models

Government School Growth Projections

It is anticipated that Victoria’s total school age population (5-18) will increase by over 80,000 student enrolments between 2015 and 2020, or over 9.0 per cent. The market share for the Government school sector is on average 67.3 per cent for primary schools and 56.3 per cent for secondary schools.

Over 70,000 students or over 85 per cent of this growth will be concentrated in the greater Melbourne area.

The next two pages includes two population growth heat maps of the greater Melbourne area. These maps identify the scale of population growth by suburb for both the 5-11 and 12-18 age cohorts.

As these heat maps identify, across key urban growth suburbs, Victoria can expect to see increases in the order of 1,000 to 2,000 additional primary school aged children over the next five years. In Craigieburn, currently the highest growth area for school aged children, 3,377 additional students are forecast over the next five years.

Analysing these population projections against current average market share and assumptions of reasonable school capacity, these forecasts translate into a provision shortfall*.

The scope and scale of new government school demand identified in the graph to the right supports a case for an immediate and significant injection of funding into new school delivery.

While useful in managing fluctuations in the school aged population, DET’s stock of relocatable buildings is not designed to meet long-term enrolment growth.

Figure: Capacity shortfall (by number of schools) Source – DET SAFi (Small Area Forecasts)

*Projected provision shortfall is a high level assessment of future provision requirements and is calculated as the difference between capacity at existing schools and projected student demand. In some areas an options analysis may be required to determine the most suitable solution to meet the projected provision shortfall, which may include providing additional capacity for existing schools.
15. Forecast change in population for students aged between 5-11 from 2015 to 2026 by LGA

Source: DET / .id forecasting SAFi (small area forecasts)
15. Forecast change in population for students aged between 12-17 from 2015 to 2026 by LGA

Source: DET / .id forecasting SAFi (small area forecasts)
15. Changing population density and needs requires innovative solutions

Schools: Government

Established areas
While the most intense and sustained growth is being experienced on Melbourne’s fringe in new growth areas, an emerging provision challenge is also being experienced in established areas.

These challenges are complex, with pockets of growth and large future developments occurring alongside current under-enrolment at many schools. The impact of student choice on provision challenges varies between different school communities.

Higher land values in the inner city coupled with the need for vertical schools due to limited land availability will also likely mean significantly higher costs for infrastructure, more complex planning and longer lead times than in growth areas.

Plan Melbourne will further drive residential intensification in strategic development areas. The priority areas for planning include the expanded central city, the Monash Employment Cluster and the La Trobe Employment Cluster (City of Banyule).

Special needs provision
Victorian Government school students with disabilities have access to a range of education opportunities across mainstream schools with supported inclusion and specialist settings. The Education and Training Reform Act 2006 also recognises the right of parents and students to choose an education setting appropriate to their needs (including in a local neighbourhood school should they choose so).

Research commissioned by DET suggests that more inclusive provision in mainstream schools would improve outcomes for many students with disabilities. However, this research also identified significant gaps and the need for further work to achieve real improvements for learners with disabilities in Victorian Government schools.

Due to a lack of sufficiently rich demographic and needs-based data to efficiently forecast demand for different types of disability support infrastructure, planning for students with special needs has typically been reactive rather than a proactive approach to investment decision making.

DET has identified this as an area for improvement and a number of reform projects are underway across DET to improve provision planning for students with disabilities. This work aligns closely with the intent of the Special Needs Plan in Victorian Schools to increase the capacity of schools to support students with special needs. This also includes the capacity of school infrastructure to respond to building users needs.

South Melbourne Primary School Ferrars Street

Background
South Melbourne is one of the fastest areas in the inner city with the whole population expected to increase from 18,400 in 2015 to 33,700 by 2025. This equates to around 3350 additional persons aged 5-11 in South Melbourne and the surrounding areas by 2025 that will need to be accommodated through existing and new government and non government schools.

The development of South Melbourne Ferrars Street will help ease pressure on the existing school network and assist to meet growth in the future. DET recognises that this school is not enough to meet demand in the area and is proposing an additional school in South Melbourne Park and currently reviewing provision requirements with the Docklands and surrounding areas provision review as well as working with the state authorities on future government school provision requirements for Fishermans Bend.

The Government has an election commitment to building the Primary school by 2018 to accommodate 525 primary schools students and up to 44 Early Learning Education students on site at any one time.

Rationale
Due to limited land availability the Ferrars Street site is substantially smaller than a standard DET primary school site which has created the need for a vertical school to be built in one stage.

Features
South Melbourne Ferrars Street will be the first vertical primary school in Victoria. The five floor building will have integrated community and early childhood facilities.

The key features of the school will be:
- Research standard netball courts
- The top floor and the rooftop will provide a secure early childhood facility with an outdoor area
- The building is considered to be additional teacher with ecological gardens on one side of the building and outdoor space which can be utilised by the school and the community
- Inclusive school design including two large elevators, and built to the universal design standards
- Innovative design with open plan learning spaces
- The location of the early childhood centre enables strong transitions through to school years
- Adjacent to public transport and future parklands.
15. Demand for Higher Education is increasing

Higher Education

A recent report by Deloitte Access Economics found that, in total, around 3.8 million new university qualifications (2.5 million new undergraduate qualifications and 1.3 million new postgraduate qualifications) will need to enter Australia’s knowledge economy over the period 2015–2025 to meet this demand. This means that on average, Australia will need approximately 227,000 new undergraduate qualifications and 115,000 new postgraduate qualifications each year over this period. Victoria’s universities will be major contributors to these skill needs (DAE, 2015).

- The demand forecasts for the University of Melbourne, RMIT and Deakin University have been calculated from the maximum, average and minimum year on year CAGR for full-time equivalent student loads (2009 – 2014).
- With the continued growth in overseas enrolments, growth in the sector is expected to exceed growth in population. The impact that this will have on the individual service providers is highly varied and is dependant on international rankings, programs offered and university fees. In addition, the sector will also be impacted by other macroeconomic factors including the strength of the Australian dollar, competition for other overseas providers and other general factors impacting the economic condition.
- University higher education now accounts for approximately two thirds of total education exports in 2014-15 (ABS,2015). Victoria boasts the location of the most highly ranked university in Australia, in addition to a number of other world-class education providers that have generated consistent demand for courses by international students.
- Given the decentralised model of delivery, student enrolments are highly dependant on the strategic direction of the individual University. Recent proposals to deregulate the pricing scheme of the university sector could impact the enrolment at any given university and the number students in selected courses.
- The future asset requirements to meet the projected demand will also be dependant on the level of technological change within the universities and the industry in general. The rapid development of Massive Open Online Courses (MOOCs) is expected have a significant impact on the industry and presents both a threat and an opportunity for the industry. A MOOC method of delivery (online) would be expected to have lower operating costs than the traditional mode of university education. In some instances, the services are provided free of charge.
- The Federal Government has begun centralising higher education across the country to improve national continuity.
16. Localised population growth has stretched, and in some regions exceeded, the capacity of ECE and Schools

**Early Childhood**

The 4,012 registered providers have 217,229 approved places (ACECQS), but localised accurate demand data categorised into the range of early childhood services is not available. This coupled with the governance of the sub-sector makes demand assessment problematic.

Within the 4,012 registered providers there are 2,208 providers delivering kindergarten programs to children aged 4 and 5 years. Kindergarten is funded for children in the year before school. Children who turn 4 before 30 April in the year they wish to attend are eligible. DET has provided funding of $2,112.0 per student in 2014, increasing from $1,826.0 in 2010. This is a result of increased hours from 10 to 15.

Early Childhood education is operated under a variety of ownership models, including private, community and local government operators. There is no single entity who has control or oversight of state-wide facilities acquisition, maintenance or disposal, although DET does administer limited funding and grants for capital upgrades, maintenance and construction of new facilities. The VAGO 2011 audit concluded that DET did not understand or effectively manage, demand for early childhood services and relied heavily on local government to identify and meet service demand.

Increasing demand (via demographic changes) and the disparate nature of the Early Childhood Education industry in Victoria will make it increasingly difficult for families to access spaces for their young children moving forward.

**Higher Education**

Demand for Higher Education is expected to grow by approximately 563,000 places by 2030 (relative to 2012 figures). In addition to population growth and increased educational requirements for many jobs in Australia, in 2012, the Commonwealth Government lifted previously imposed limits on domestic bachelor-degree student numbers at public universities. The new ‘demand driven’ system replaced a ‘supply driven’ system, in which the government allocated student places to public universities.

The demand driven system has encouraged technology-based innovation in higher education. This is forcing universities to consider lowering demand for traditional lecture theatres which in turn provides opportunities for re-purposing of existing assets.

Given the competitive nature of the higher education sub-sector to encourage and retain students on undergraduate and post graduate courses, many are actively planning to adjust their asset portfolios to meet additional capacity requirements and the changing functionality and pedagogical requirements of its students.

**Schools: Government**

Across the state, schools in growth areas have exceed capacity whilst in regional areas schools are typically under capacity.

Due to the change in population demographics, including a shift from rural and regional areas to metropolitan areas, as well as the ability of parents to choose the school that their child attends, some schools are over-entitled, while other schools are at or over capacity. DET works with schools to address these issues through infrastructure and non-infrastructure solutions e.g. school zoning.

The overall aim of DET is to reach a point where the school asset base is of suitable condition and accurately reflects current demand. This will enable DET to sufficiently plan for and undertake the ongoing maintenance of current stock, and address future shortfall with buildings of suitable functionality.

DET Leasing Policy (Relocatable buildings) will help to resolve demand issues locally, however a long term funding commitment to design and build new schools in high growth areas is also required.

The Government provides grants to Catholic and independent schools across Victoria to contribute to the cost of building new schools in high growth areas and upgrading facilities in existing schools.
16. Higher Education capacity to meet demand interstate comparison

Higher Education

- With the continued growth in overseas enrolments, growth in the sector is expected to outstrip growth in population. The impact that this will have on individual service providers is highly varied and is dependant on international rankings, programs offered and university fees. In addition, the sector will also be impacted by other macroeconomic factors including the strength of the Australian dollar, competition for other overseas providers and other general factors impacting the economic condition.

- Given the decentralised model of delivery, student enrolments are highly dependant on the strategic direction of the individual university. Recent proposals to deregulate the pricing scheme of the university sector could impact the enrolment at any given university and the number students in selected courses.

- The future asset requirements to meet the projected demand will also be dependant on the level of technological change within the universities and the industry in general. The rapid development of Massive Open Online Courses (MOOCs) is expected have a significant impact on the industry and presents both a threat and an opportunity for the industry. A MOOC method of delivery (online) would be expected to have lower operating costs than the traditional mode of university education. In some instances, the services are provided free of charge.

- Other than Monash University and the University of Melbourne, Victoria’s universities are operating at level below the industry median. In addition, both Swinburne and Deakin University have the lowest level of floor area per student.

- Based on projected growth, all universities are at risk of not having sufficient space to accommodate growth over the next 30 years. The University of Melbourne currently has one of the highest levels of available space (when compared to the rest of the industry). Although the analysis suggests there maybe sufficient space for the next 30 years, decreasing the floor area to student ratio would impact the research output that the university currently generate. This assumption is supported by the industry knowledge that a few of the University of Melbourne’s buildings are not fit for purpose and are currently vacant (or being leased to third parties for non-teaching purposes).
16. Sector capacity to meet demand is under pressure and the current supply needs a detailed assessment

**Capacity**

**Schools: Government**

The requirement (opportunity) in the short term is to ensure that the utilisation of the network is maximised and that new investments provide growth in network capacity. To this end, the biggest short term drivers relate to:

- Freedom of choice of schools in the public school network. Specifically, there are many underutilised schools in close proximity to at capacity schools. This presents an opportunity to facilitate the spread of enrolment demand more evenly across neighbouring schools.
- Ability to increase capacity locally to respond in a flexible and affordable manner (e.g. DET’s relocatable transfer programme).
- Clear policies around access to specialist spaces (e.g. science or technology) where these can be centralised within a region but will require additional travel costs and disruption.
- Taking advantage of technology and planning for its increasing involvement in education.

**Excess Space and Over-entitlement**

Although excess space and over entitlement exist within Victoria’s government school asset base, the schools that have excess space and are over entitled are not within the areas expected to experience significant growth, therefore it will have a limited effect on the need for new schools (as demonstrated in the table below).

<table>
<thead>
<tr>
<th>Asset class</th>
<th>Future Demand</th>
<th>Current Capacity</th>
<th>Major Projects</th>
<th>Current capacity to meet demand</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Higher Education</strong></td>
<td>344,000 by 2020 563,000 by 2030</td>
<td>Data gap</td>
<td>A capital investment program of $2-3 billion has commenced.</td>
<td>Data gap</td>
</tr>
<tr>
<td><strong>VET (TAFE)</strong></td>
<td>Knowledge economy will see demand for TAFE courses increase however current funding issues need to be overcome</td>
<td>73.04 Utilisation SCH/Sqm GFA</td>
<td>Currently under utilised, will be able to accommodate 2012 levels if returned</td>
<td>$100 million new TAFE Rescue Fund</td>
</tr>
<tr>
<td><strong>RTOs</strong></td>
<td>Data gap</td>
<td>Data gap</td>
<td>Data gap</td>
<td>Data gap</td>
</tr>
<tr>
<td><strong>Schools</strong></td>
<td>Public School demand forecast: 635,000 by 2020 718,366 by 2030 787,715 by 2040</td>
<td>724,000 (including portables)</td>
<td>New Schools PPP 15 Schools</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>ECE</strong></td>
<td>Population growth, additional 140,000 4 and 5 years olds by 2051. Growth rate of 1.12% for 0-5 years.</td>
<td>217,229 approved places across entire sector</td>
<td>Data gap</td>
<td>Data gap</td>
</tr>
</tbody>
</table>

**Higher Education (DAE 2015):**

- As delivery models become more flexible, available to a wider audience, and as people continue to learn throughout their life time, there will be better capacity to utilise existing assets in non-peak periods (such as after business hours).
- Infrastructure itself will also need to be flexible to ensure that it can adapt as a functional space to changing education and training demands.
- Infrastructure design should augment the delivery of online learning. For example, ensuring video link capacity is available for the provision of lectures from or to a remote location.
- Victoria will need to keep pace with global infrastructure standards in order to maintain its competitive advantage as a provider of international education.
17. Opportunities exist for increased asset utilisation by other secondary users, whilst recent capital works programs have created surplus supply in government schools

**Government Schools**

In 2013, based on the number of students enrolled in Victorian Government schools, the school building portfolio was 38 per cent surplus to requirements reducing to 33 per cent in 2015. Prior to VSP and BER, the level of excess space was approximately 15 per cent, indicating that these programs have more than doubled the amount of surplus space in Victorian Government schools. The excess space, being surplus to requirements, is a mix of teaching and non-teaching space, including corridors and administration space. Similar to overall excess space, excess teaching space has increased from around 8 per cent prior to VSP and BER, to 25 per cent in 2012 (VAGO 2013).

One objective of VSP was to consolidate school buildings in order to address inefficiencies associated with surplus space. Though VSP sought to take steps to address this, BER’s commitment to create new buildings at all primary schools effectively augmented, rather than consolidated, the portfolio.

The scale of oversupply of school buildings varies across regions, with Barwon South Western region having the greatest oversupply, at 55 per cent, and Southern Metropolitan the least, at 29 per cent. There is also more excess space in regional Victoria than in metropolitan Victoria (Victorian Auditor-General’s Office 2013).

There is very little actual data on the utilisation of schools outside of school hours however the anecdotal evidence suggests that the assets remain significantly under-utilised. DET’s Asset Management Plan states an objective of increasing community (third party) use of the assets. Potential uses for schools after hours include:

- OSHC
- Sporting clubs / organisations
- Arts and community programmes
- Adult and community education
- General meeting spaces.

It is specifically noted that capacity exists for significant increases in OSHC places however this is limited by the number of service providers.

The increased utilisation of schools would play a major role in reducing some pressures in the broader network (e.g. Cultural and Sporting Sectors). Other benefits may include:

- Joint funding for new projects (better assets with more functionality)
- Additional review for asset maintenance activities
- Increased security which may result in lower vandalism rates
- Increased alignment between school and the broader community
- Shared funding of operational expenses (utilities, cleaning, security and maintenance).

**TAFE/Higher Education/VET/Private Schools/Early Childhood**

Insufficient data is publicly available on Higher Education/VET/Private Schools/Early Childhood to form a detailed assessment on utilisation of these assets. TAFEs are under-utilised with DET internal information suggesting an average utilisation of 82.79 SCH/Sqm GFA.
18. There are no systematic infrastructure use charges in place for the Education and Training Sector

Individual entities may have long lease arrangements with State or Local Government, but the practice is not wide spread. Both private and public sector education entities are heavily subsidised by Government. Therefore, it is assumed that fee for service charges are unlikely to be set to cover operating expenses.

Early Childhood Education

• Early childhood education charges comprise funding through the Commonwealth Government and out of pocket costs funded by service users. Early childhood providers are required to provide a fee policy which details information to parents about the total cost of their education and any non-refundable costs which includes maintenance costs.

Schools: Government

• Government schools are fully funded by the State Government, including the materials and services the child uses at school. There are three categories of items that parents may be requested to make a payment for, including:
  - Essential Education Items – text books
  - Optional Extras - certain programs
  - Voluntary Financial Contributions – this may include a contribution to the maintenance of the school’s infrastructure.

• DET conducts regular audits, aiming to ensure that schools are providing students with high quality facilities.

Higher Education

• The Commonwealth Government provides funding to universities for each enrolled full time equivalent student. Much of the funding provided by the Australian Government is directed at teaching and learning in higher education through a range of initiatives. These initiatives assist with infrastructure, student support, increasing equity and improving quality in higher education.

• Students are also required to contribute to student fees.

• Increasingly, scientific research infrastructure at Universities and Medical Research is charging users for access to the facilities at fees that are reflecting the true cost of the infrastructure, for example the synchrotron at Monash University and Melbourne Universities’ s Bio 21 facility. However this is not done consistently across the sector.

Source:
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