

7.0 Education

STRATEGIC OBJECTIVE

Equip growing urban and regional populations with the modern schools and training infrastructure required to deliver educational services for a competitive, innovative economy

KEY CHALLENGES

- Match education facilities to growing student populations to meet the legislative requirement that each child is entitled to be enrolled at the government school in his or her area
- Ensure that ageing assets keep up with standards for classroom conditions and support modern and technology-enabled teaching and learning
- Adopt a more coordinated and innovative planning response to develop partnerships for delivering education and training, and to identify and secure education sites and facilities ahead of time
- Ensure that NSW has a dynamic and innovative vocational training sector that is responsive to industry and client needs

OPPORTUNITY

KEY Infrastructure NSW RECOMMENDATIONS

COSTS & FUNDING

Service growing student populations and enrolments in the government sector

- Create a 10-year Schools Growth Program for education infrastructure projects to service growing student populations

Reservation of \$700 million from the *Rebuilding NSW* initiative

Upgrade classrooms and facilities in regional NSW

- Create a 10-year Regional Schools Renewal Program to upgrade classrooms and facilities to enable future-focused learning

Reservation of \$300 million from the *Rebuilding NSW* initiative

Plan for the future

- Accelerate the finalisation of the School Asset Strategic Plan to manage the projected capital expenditure requirements for teaching space supply to 2031 and realign the Department of Education and Communities' asset portfolio to better match demand
- This asset plan should explore new approaches to providing high quality learning spaces, leveraging partnerships and optimising existing resources
- Ensure that policies in the NSW planning system are aligned with and enable the delivery of the School Asset Strategic Plan

Explore and develop new models of schooling

- Expedite demonstration projects in metropolitan and regional areas to test and showcase innovative ways of delivering functional performance requirements for new school facilities
- Explore partnership opportunities with non-government providers and innovative school models through PPP delivery

Match TAFE services with changing demand

- TAFE NSW should immediately start preparing a Strategic Asset Management Plan to ensure that the TAFE asset portfolio keeps pace with changes in training needs in an increasingly competitive environment and is realigned to better match demand

Snapshot

- The NSW Government provides education and training to over 1.3 million students through the public school system and TAFE NSW.
- There are currently 2,221 public schools in NSW and the average school building is 41 years old.
- The NSW Government's investment in schools has a current asset replacement value of \$25.1 billion.
- The current annual capital investment for schools is around \$400 million, with an annual maintenance program of \$347 million.
- TAFE NSW operates 168 sites across 130 campuses in metropolitan, regional and rural NSW. The TAFE NSW asset portfolio consists of land, buildings, mobile training units and extensive information communication technology (ICT) systems that support technology-based learning.

7.1 Summary

Having access to a good education enables people to achieve their full potential and become active, engaged members of society. The education and training sector also contributes to the State's productivity by providing students with the skills they need for future workforce participation.

In NSW, each child is entitled to be enrolled at the government school in his or her intake area. A growing population is placing this entitlement under increasing pressure.

Population projections for school aged children to 2031 show growth of 267,000, of which 65 per cent (or an expected 173,000 children) are expected to enter the public education system. An additional 6,250 classrooms will be needed to accommodate these extra students. Over 5,450 classrooms will be required in Sydney, including 4,050 in Western Sydney.⁹⁵

Meeting this growth in demand will be a challenging exercise. However it will also create opportunities to explore new ways to provide schools and develop new school models.

For example, as it is no longer affordable or cost-effective to acquire land in inner Sydney to build single storey schools, new options need to be considered – such as building larger multi-storey schools on smaller sites. Better engagement in the land use planning process by government and non-government education providers is needed to secure strategic sites for schools in greenfield areas, repurpose surplus government sites

for the provision of education facilities in established areas and partner with the private sector to deliver additional facilities in time to meet demand.

Increasingly, schools will need to use their assets more intensively or share resources with their local communities. Innovation in teaching methods will require learning spaces to be flexible and adaptable, supporting contemporary techniques and incorporating new technologies.

To meet changing demand, Infrastructure NSW is recommending a reservation of \$700 million from the *Rebuilding NSW* initiative to create a 10-year Schools Growth Program. This program will service the growing NSW student population, providing investment for much-needed education infrastructure projects while also investigating new models of school provision, including undertaking demonstration projects.

In addition, a \$300 million Regional Schools Renewal Program should be created to provide better facilities to more students and – in doing so – upgrade classrooms and facilities to support future-focused learning.

With TAFE NSW entering a contestable market from 2015, there is also a pressing need to ensure that the TAFE asset portfolio supports the mix of courses and service delivery methods it needs to offer to succeed in a competitive environment.

7.2 Progress since 2012

The NSW Department of Education and Communities (DEC) is implementing reforms designed to improve educational outcomes for all NSW students. These reforms include the following strategies: *Local Schools Local Decisions*, *Every Student Every School*, *Great Teaching Inspired Learning*, *Rural and Remote Education Blueprint* and *Connected Communities*.

The 2012 State Infrastructure Strategy focused on finding better ways to identify, deliver and manage assets. To this end, DEC has:

- Established web-based *Educational Facilities Standards and Guidelines* to provide a more flexible approach to school design which supports Future Focused Learning
- Commenced the development of a NSW Schools Asset Strategic Plan which supports the Government's reform agenda and aligns to the Department of Planning and Environment's regional and sub-regional land use planning frameworks.

From January 2015, there will be a move to a contestable market for government-funded training. TAFE NSW is changing the way it does business to prepare itself for this more competitive environment.

95. NSW Department of Education and Communities

7.3 Ongoing challenges

The quality of education and training in NSW depends on three main factors: the curriculum, our teachers and the infrastructure that supports service delivery.

Six key drivers impact on the planning and utilisation of education and training infrastructure:

- Responding to changes in demographics – the public school student population is projected to grow, requiring more classrooms and new ways to accommodate them
- Responding to training demand – having the agility to competitively offer training that responds to economic cycles, demographic change, technological enhancements and industry needs
- Future-focused learning spaces – designing classrooms to allow a variety of teaching and learning practices, with a focus on innovative uses of technology and space
- Efficiently managing assets to meet minimum service delivery standards and prolong asset life
- Better using schools and TAFEs as community assets – treating education and training assets as community assets that can be accessed outside of teaching hours
- Using partnerships to cost effectively procure assets – planning for education facilities on a sector-wide basis, including through partnerships with tertiary education providers, local government, the non-government sector and industry, to improve utilisation and obtain value for money.

These drivers underpin the recommendations in this report.

7.3.1 Matching facilities to demand and educational requirements

To meet the legislative requirement that each child is entitled to be enrolled at the government school in his or her local intake area, education infrastructure must be planned and delivered to service growing student populations.

Growth in demand

By 2031, it is projected that:

- 173,000 additional students will attend public schools across NSW. This is a 23 per cent increase which, after utilising existing capacity, equates to a demand for 6,250 more classrooms. This growth will be divided between primary and secondary students as follows:
 - an additional 110,000 primary school students will enter public primary schools, requiring additional capacity equivalent to 2,600 classrooms
 - an additional 63,000 secondary school students will enter public high schools, a demand equivalent to 3,650 classrooms.
- Approximately 80 per cent of the public school student growth will occur in metropolitan Sydney. West Central and South West Sydney are the regions that will require the most new classrooms to service population growth. Growth in these two regions alone will require an additional 3,900 classrooms. The Hunter is the fastest growing region outside Sydney, while the State's Central West, Orana and Murray-Murrumbidgee regions are expected to see a decline in overall student populations, as shown in Figure 7.1 overleaf.

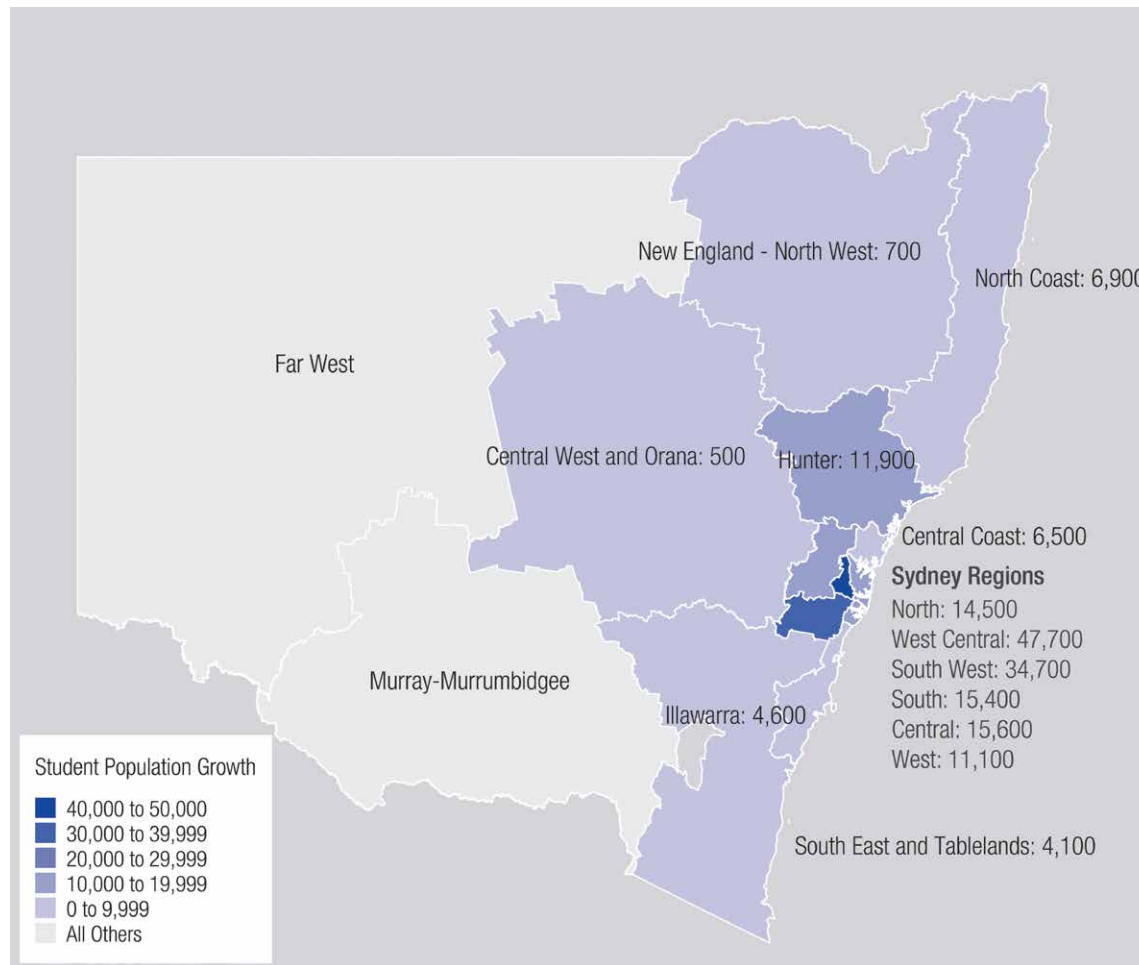
Meeting these demand increases will require a structured program to support the delivery of additional classrooms and related infrastructure in the greater metropolitan region.

Recommendation

Infrastructure NSW recommends that a reservation of \$700 million from the *Rebuilding NSW* initiative to create a 10-year Schools Growth Program for education infrastructure projects to service growing student populations.

The Department of Planning and Environment has projected that NSW's working age population will increase by 17 per cent to 5.6 million by 2031.

Figure 7.1 Student population growth to 2031



Source: NSW Department of Education and Communities

If current trends are maintained and 9 per cent of the working age population continues to undertake training with TAFE NSW or its competitors, there will be over half a million students enrolled in the vocational education and training sector in NSW in 2036.⁹⁶

Matching assets to demand

If recent trends continue, almost 80 per cent of Sydney’s additional population will be accommodated in established suburbs. Land acquisition and building costs have increased significantly, making it neither cost effective nor affordable to acquire land to deliver classrooms in single storey buildings in established areas.

The capital and land costs of providing the equivalent of 6,250 classrooms by 2031 is estimated at \$8.25 billion in 2014 dollars.⁹⁷ These cost projections are based on current models of school provision, using what are by international standards small schools on large sites. If NSW schools are to continue to keep pace with rising demand, new models of schooling need to be developed that entail building larger schools on smaller sites, with a heavy focus on the redevelopment of existing sites to minimise land acquisition costs.

The physical condition of school and TAFE assets also has an impact on student learning, including on the ability of students to concentrate and the instructional effectiveness of teachers.⁹⁸ An ageing asset portfolio is likely to bring with it an ever increasing need for maintenance. In addition to meeting standards for classroom conditions, targeted preventative maintenance to prolong asset life should be pursued. DEC should use opportunities to add to and renew its portfolio to cost effectively address the functionality of existing assets.

96. TAFE NSW

97. NSW Department of Education and Communities

98. KPMG 2007, Brownfield Schools Redevelopment Prioritisation and PPP Suitability Methodology

The current annual capital investment for schools is \$400 million, with an annual maintenance program of \$347 million. Over the next 20 years, the school asset portfolio will be even older, with increasing maintenance costs making a growing contribution to future funding needs.

The sustainability of multiple, underutilised primary and secondary schools in rural and regional areas of NSW needs to be carefully considered. In particular, further examination is needed to determine if education outcomes and teaching and learning experiences could be enhanced by making better use of existing assets.

Recommendation

Infrastructure NSW recommends that a reservation of \$300 million should be made from the *Rebuilding NSW* initiative to create a 10-year Regional Schools Renewal Program.

New approaches to the provision of learning spaces will need to find efficiencies, leverage partnerships, identify additional funding sources and optimise existing resources. To manage demand caused by population growth, DEC's School Asset Strategic Plan should promote:

- Larger schools in highly urbanised areas so that expensive land acquisition is minimised
- Optimisation of school sites and assets (where feasible) so that
 - growth in the demand for teaching space is accommodated on existing school land
 - the operating costs of schools are minimised
 - more students have access to facilities that support future-focused learning
- Removing land use planning policy barriers to increasing school densities and confirming that developer contributions will partially fund both land acquisition and the construction of the infrastructure needed to provide education services to new developments
- Better co-ordination between government land holders and non-government providers to
 - secure strategic sites ahead of time in greenfield areas to be on-sold to education providers when a school is required

- identify opportunities in areas of high demand to repurpose surplus government sites for the provision of education facilities
- identify opportunities for incorporating schools into compatible government developments
- Using existing school assets more intensively, with opportunities for staggered school starting times potentially increasing the number of classes taught per facility
- Partnering with the development industry to develop schools in multi-storey buildings to service dense population areas.

Recommendation

Infrastructure NSW recommends that DEC accelerate the finalisation of a funded School Asset Strategic Plan that will manage the projected capital expenditure requirements for teaching space supply to 2031 and realign DEC's asset portfolio to better match demand.

The asset plan should explore new approaches to the provision of learning spaces, leverage partnerships and optimise existing resources.

Strong collaboration between government agencies is also critical so that education planners know where and when residential developments will occur, including the types of housing, the rate of development and land acquisition opportunities.

By being better engaged in the land use planning process, government and non-government education providers can identify strategic locations to build schools in time to meet demand. State and local governments should simplify and standardise policies that regulate the development assessment of education infrastructure to facilitate the expected future investment in NSW schools.

It is unlikely that large scale urban housing developments in existing high density areas will be able to be serviced by an existing school if that school is already operating at capacity. In these circumstances, opportunities should be explored for partnering with the development sector to deliver new schools using high value, modest parcels of land that host multi-level teaching spaces as part of vertical mixed use developments.

Recommendation

Infrastructure NSW recommends that planners and regulators in State and local government must ensure that policies in the NSW planning system are aligned with and enable the delivery of the DEC School Asset Strategic Plan.

Different models of operation

A recently commissioned independent review of DEC's procurement methods observed that there are limitations to the effectiveness of Public Private Partnerships (PPP) as a vehicle for meeting enrolment growth, using existing school models on greenfield sites. However, Infrastructure NSW considers that PPPs may yet offer a value for money alternative to meet the significant projected need for facility investment and upgrades at established school sites.

Past and recent education PPPs across Australia have delivered value for money outcomes against their public sector comparators and demonstrated good outcomes in terms of shorter construction periods, innovation and service delivery. In one survey, 85 per cent of principals of NSW PPP schools reported that the model enabled them to devote more time to leading teaching and learning than in a non-public private partnership school.⁹⁹

In total, six education PPP projects have reached financial close in NSW, Queensland, South Australia and Victoria, with a further two PPPs under procurement. Of those education PPPs that have reached financial close in NSW, value for money was achieved with shorter construction timeframes than traditional design and construct contracts. On this basis, a report by the Auditor General found that *“risk transfer was well suited to the circumstances and to securing value for money”*.¹⁰⁰

99. Department of Education and Communities 2010, State Leadership Fellowship 2009–2010 Florence Ramstead Award Report

100. NSW Auditor General 2006, The New Schools Privately Financed Project

Any new model for managing and operating school facilities, must enable schools to:

- Be more connected, with learning spaces that strengthen student engagement, increase opportunities for group and individualised learning, and encourage greater collaboration among teachers
- Be inviting, safe and secure to foster positive learning experiences, enhance learning outcomes and support student and teacher wellbeing

New schools will also need to be designed to support future-focused learning, including the adoption of digital technologies and innovative teaching techniques. However, assets in the current DEC portfolio vary in condition and functionality, with many ill-suited to responding to advances in teaching and learning. The program for the refurbishment of existing assets can be accelerated and enhanced by optimising the impact of future investment in ways that will give more students and teachers access to high quality school environments and to facilities that support future-focused learning.

As the population of NSW grows, demand for community infrastructure will increase. The sharing of school and local infrastructure with communities will help to meet this demand. In addition to teaching and learning spaces, students need access to other spaces and facilities such as out of school hours care (OOSH), libraries, halls, meeting rooms, gymnasiums and playing fields.



Figure 7.2 Closing the gap

Factors that will close the potential education infrastructure funding gap over 20 years



Source: Infrastructure NSW

The design of new schools should anticipate the sharing of infrastructure with communities. This requires:

- Specialised design where the security and utility of the teaching and learning spaces is not compromised by use out of hours –the DEC School Asset Strategic Plan should address the policy and funding implications of this approach
- Better planning of new communities through close liaison between education asset planners, local government and the private sector
- Policy frameworks and flexible governance arrangements that encourage and support school/community resource sharing.

Demonstration projects are an important way for the Government to show leadership in testing and encouraging new ideas, and showcasing the benefits of new approaches to providing education and community infrastructure. Projects that explore the potential opportunities delivered by partnerships and innovative new school models, including design innovation, should be pursued.

Recommendation

Infrastructure NSW recommends that DEC expedite the development of demonstration projects in metropolitan and regional areas to test and showcase innovative ways of delivering functional requirements for new school facilities.

In developing project options DEC should also explore partnership opportunities with non-government providers and innovative school models through PPP delivery.

The introduction of competition to the vocational training sector will require TAFE to be dynamic in its course offerings responding to industry and client needs. TAFE business planning will identify the types, location and number of assets needed for service delivery. Courses that require access to sophisticated expensive equipment should be located in specialised campuses. Course and asset optimisation will assist in reducing operating costs and improve asset utilisation.

While on-campus face-to-face contact remains the primary method of training delivery, there is an increasing focus on the delivery of courses using technology. Over the last four years, electronically based course delivery has increased by over 85 per cent and now accounts for almost a quarter of all training.¹⁰¹ A greater use of off-campus learning models will change the mix of facilities needed to deliver training.

This kind of multimodal delivery is forecast to continue to grow, benefitting from ongoing innovation in mobile and remote learning, and a greater use of technology in a larger number of jobs.

Recommendation

Infrastructure NSW recommends that TAFE NSW immediately commences the preparation of a Strategic Asset Management Plan to ensure that the TAFE asset portfolio is managed efficiently to keep pace with changes in training needs in an increasingly competitive environment and is realigned to better match demand.

¹⁰¹. TAFE NSW

New school partnership with Canada Bay Council

A new primary school in Concord West will operate as a partnership with the local council, sharing facilities with the council and the surrounding community.

The school site is located on Victoria Avenue, Concord West, adjoining the Powell's Creek Reserve. The site is made up of land owned and managed by Canada Bay Council and leased by DEC for a peppercorn rent. The school will have capacity for 600 students and is expected to open in Term 1, 2015.

Canada Bay Council will operate an Early Childhood Centre and Child Care Centre from the site. The school playing field will permit community use after school hours and the school hall (purpose-built larger than standard school sizes) will be available for community purposes after school hours.