

INFRASTRUCTURE
VICTORIA



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Learning for life

Preparing kindergarten, school and TAFE
infrastructure for the future



About us

Infrastructure Victoria is an independent advisory body with 3 functions:

- preparing a 30-year infrastructure strategy for Victoria, which we review and update every 3 to 5 years
- advising the government on specific infrastructure matters
- publishing research on infrastructure-related issues.

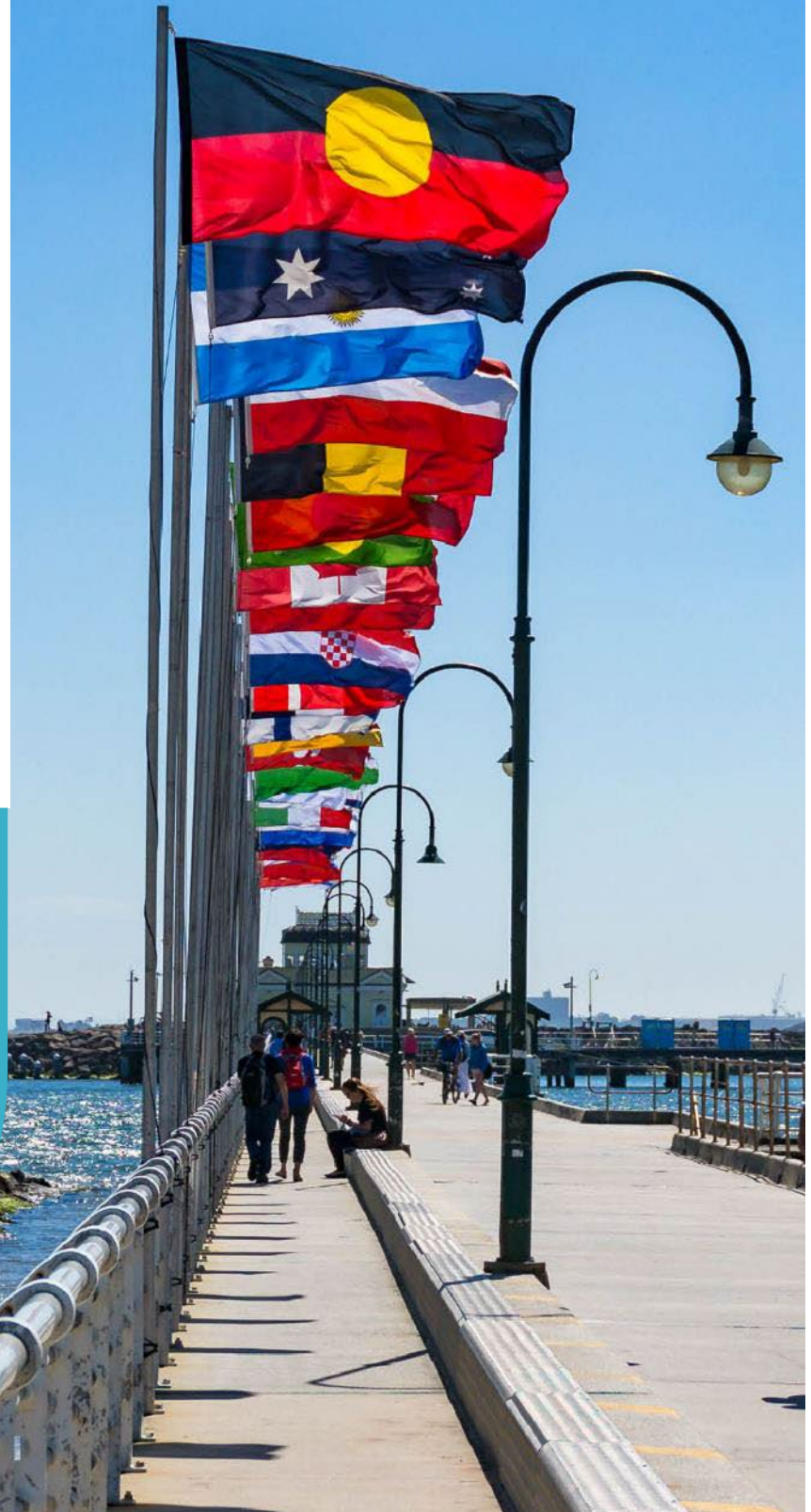
Infrastructure Victoria also helps government departments and agencies develop sectoral infrastructure plans.

Infrastructure Victoria aims to take a long-term, evidence-based view of infrastructure planning, and we inform community discussion about infrastructure provision.

Infrastructure Victoria does not directly oversee or fund infrastructure projects.

Acknowledgement

Infrastructure Victoria acknowledges the Traditional Owners of Country in Victoria and pays respect to their Elders past and present, as well as Elders of other First Peoples' communities. We recognise that Victoria's infrastructure is built on land that has been managed by Aboriginal people for millennia.





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Summary

Learning opportunities give Victorians a better future

Every Victorian deserves the chance to reach their potential. Education gives students the chance to develop their minds and bodies, learn new skills and get to know themselves, other people and the world around them. A great education gives people a better chance of getting a well-paid job.¹ It also helps them better care for their physical health and social and emotional wellbeing, and lets more people deeply participate in their communities.²

The Victorian Government helps make sure every Victorian can access a great education, including by funding kindergarten programs, schools and TAFE courses. Many factors go into delivering students a high quality education, at any stage of life. These include skilled and experienced teachers, student and parent engagement, a strong curriculum and quality educational infrastructure.³

People can learn in many ways, at any age. People might use resources from the internet, visit their local library, or take part in a learning activity run by their local learning and employment network, neighbourhood house, or adult and community education provider. But the main ways the Victorian Government provides structured learning opportunities is by funding kindergarten programs, government schools and TAFEs.

This report examines the future demand for kindergarten programs, government schools and TAFE. It uses research and modelling to assess how much education infrastructure Victoria might need over the next decade. It makes recommendations for the Victorian Government to make cost-effective investments in better quality infrastructure. These recommendations can help the government prioritise investments to achieve its policy goals, make best use of government funds, and deliver good educational opportunities for Victorians.

Victoria will need more education infrastructure where people can more easily reach it

Kindergartens, schools and TAFEs need infrastructure to deliver a great education. They need kindergarten rooms and outdoor play space, school buildings and grounds, and modern TAFE facilities. Over the next decade or so, the Victorian Government forecasts Victoria will have more pre-school and school-aged children, and a larger workforce including more young workers. This means that kindergarten programs, government schools and TAFE are all likely to experience rising demand.

The government also has a policy to increase early learning opportunities for 3-year-olds and 4-year-olds.⁴ This will speed up demand for places in early learning programs. The government has also nearly completed its promise to open 100 new schools. It has already opened 75, and the other 25 are due to open by 2026.⁵ But it has not said whether it will build any more after that.

Victoria is also experiencing labour shortages, especially in healthcare and construction.⁶ The demand for more skilled workers for the energy transition may make these labour shortages worse.⁷ Victoria's TAFE institutes will need more facilities to train more workers to help fill these shortfalls.

All students have guaranteed access to their local government school, but Victoria's education infrastructure is not always located in places where every Victorian school student can easily access it.⁸ If the government does not fund or facilitate construction of extra infrastructure, these problems might get worse.

This research finds that Melbourne's outer suburbs and growth areas, and regional Victoria, often have less educational infrastructure than Melbourne's inner and middle suburbs.⁹ These outlying areas are often places that also have more signs of disadvantage. Also, Melbourne's new growth suburbs are likely to need much more education infrastructure for the many more children and young people that will soon live there.

The Victorian Government released housing targets for each local government area in 2024.¹⁰ Achieving these targets would mean that 70% of new homes would be in established areas in the future.¹¹ This would be a shift from current trends. Our research shows that more compact cities offer Victorians a better quality of life and more choice. We have previously recommended that the government use a new plan for Victoria to reinforce growth in established areas.¹²

In the short term these policies are not expected to change where new education infrastructure is needed. In the medium to longer term the government should consider how it can plan and deliver more education infrastructure in established areas of Melbourne and regional cities. The government can keep monitoring and responding to increases in the school-aged population in Melbourne's inner and middle suburbs so that all children can access their local schools.

Efficient investment can deliver better value for money

Delivering all the education infrastructure needed for Victorians is expensive. When, whether and how the government builds and facilitates education infrastructure affects how much it costs. This research examines different ways the Victorian Government can best invest in education infrastructure. This includes measures to reduce costs, maximise the benefits of existing infrastructure and land, and encourage other providers to invest.

For example, private and non-for-profit providers, and local governments, provide nearly all of Victoria's kindergarten infrastructure today.¹³ Many will keep providing more in the future. But to deliver enough kindergarten rooms at the speed and scale required to achieve the government's policy goals, the Victorian Government will need to build or subsidise more infrastructure.¹⁴ The Victorian Government should maximise the contribution of other infrastructure providers by targeting its support to areas where others are unlikely to invest. It should also help facilitate these investment sources to give providers the confidence to invest more.

To provide extra school places, the government should add more relocatable buildings to existing schools, construct new buildings at existing schools, and build bigger new schools. These approaches help reduce school building costs.

The government should also add new TAFE facilities on existing TAFE campuses that have spare land. In some cases, TAFE institutes can build more intensively and consolidate their land holdings. Proceeds from land sales can help offset build costs for new campuses.

The government might also adopt new construction methods and technologies to help reduce building costs. For example, our commissioned report, *Digital technology and infrastructure productivity*, found that machine learning and artificial intelligence make building education infrastructure more efficient. The evidence shows these technologies could deliver over half a billion dollars in economic benefits by 2055, by helping avoid cost overruns and reducing project risks.¹⁵ The government also has opportunities to use standardised designs for new schools to reduce design and building costs.

Planning and investing now can save money and improve certainty

Education infrastructure takes time to plan, build and deliver. By investing in new kindergartens, planning a pipeline of future schools, and planning for expanded TAFE campuses now, the government can set aside land and begin delivery early in a cost-effective way. This can help avoid large lags between population growth and infrastructure delivery.

Detailed, published plans help give the non-government sector the information it needs to confidently plan its own infrastructure. It can also signal to the private sector to invest in digital technology capabilities and modern methods of building new facilities.

When planning for education infrastructure in the longer term, the government can keep reviewing forecasts so its plans and projections match a more complex reality. The Department of Education regularly reviews enrolment and population trends and provides advice to the government on how to best meet that demand. Sometimes the demand for education grows faster or slower than predicted in some places. Government can keep updating its pipeline and adapt its approach over time. This includes prioritising better use of existing infrastructure and requiring new building projects to use new technologies and tools to achieve cost efficiencies.

Decide and plan education infrastructure now

We make 4 recommendations for the Victorian Government to invest in education infrastructure in a way that generates benefits for communities and makes the best use of government assets and funding.

Recommendation 1

Facilitate markets for private and not-for-profit investment in kindergarten infrastructure. Share regularly updated information about the demand for and supply of kindergarten places.

Private businesses, not-for-profit organisations and local governments all deliver kindergarten programs. These parties and the Victorian Government will also supply the kindergarten infrastructure needed by 2036. This combination offers different options for the diverse needs of families and children. The government can make the most of its funding by investing in places where other market participants are unlikely to deliver kindergartens and childcare.

The Victorian Government should do more to facilitate delivery of kindergarten infrastructure in a market with many providers. It can do this by continuing to build and maintain trusted and transparent relationships with providers, both private and not-for-profit, and local governments to encourage information sharing.

The government should give regular updates about the demand and supply of kindergarten places to encourage planning and investment from all sectors. The current kindergarten infrastructure and services planning process is a good start.¹⁶ To make it more timely and easier to access, the government should develop this into an online platform that consolidates statewide information from all sectors, where possible. Publishing this information can also help families choose where they live in Victoria.

Better access to information about the market allows providers and local governments to:

- decide where and when to invest
- explore and align co-investment, such as from local governments, large providers and other land holders
- collaborate on building design, such as integrated hubs that house other government services alongside kindergartens.

Recommendation 2

Immediately publish priorities for government investment over the next 5 years to deliver kindergartens in communities that will have the greatest need in 2036.

The Victorian Government should immediately publish clear priorities for where it will direct its kindergarten investment over the next 5 years. It should keep the option to adapt these plans as other providers' activities become clear. This should include deciding which school sites might host government funded kindergarten infrastructure to avoid doubling any existing or planned facilities.

Our modelling estimates that kindergarten infrastructure will cost the Victorian Government \$3.9 to \$7.2 billion by 2036 (for capital costs, excluding the value of all land). If the government needs to buy land for these kindergartens it might cost an extra \$2.2 to \$3.8 billion by 2036. The funding needed might be lower if the government can encourage more investment from other investors or governments, construct kindergartens more efficiently, or use existing land rather than buying it.

This cost range is large as there is some uncertainty in how much infrastructure will be delivered by the private and not-for-profit sector, and how much the Victorian and local governments will need to deliver to fill any gaps. We have used scenarios that assume different funding levels by the Victorian Government. This cost range assumes the government provides infrastructure for kindergartens that are needed in lower socio-economic areas, either split 50% with local government (lower cost) or 100% funded by the Victorian Government (higher cost).

The Victorian Government should target its kindergarten funding to places with the greatest need. Using this approach will help meet the early learning reform objectives by 2036, minimise the cost to government, and deliver the largest benefits to communities. This includes targeting funding towards lower income areas, Melbourne's outer and new suburbs and some regional centres.¹⁷ It also can include grants to local government and not-for-profit providers.

Recommendation 3

Identify schools to expand and confirm areas that will need new schools. By 2030, fund expansions of existing schools and begin delivery of 35 to 60 new schools. Minimise costs by expanding the built capacity of existing schools and building larger new schools.

The Victorian Government has almost completed its 2018 promise to open 100 new schools, with 75 new schools already open, and 25 to open by 2026.¹⁸ But it has not announced any decision or funding to deliver new schools after 2026.

The Victorian Government should plan a pipeline of school expansions and new schools now. By 2030, this pipeline should be fully funded, and more urgently needed schools funded earlier. Where possible, the government should acquire land for new schools early, to reduce potential costs. We estimate the total cost for expanded and new schools needed by 2036 is between \$5.7 and \$7.2 billion, depending on the size of new schools.¹⁹ Land is around a third of the total cost for new schools on average, and up to half of the total cost in inner Melbourne.²⁰ It can also be more difficult to buy suitable land in established areas for schools. The government should consider alternative delivery models for new schools in the established areas of Melbourne to accommodate student growth and work within the limitations for building new schools in these areas.

Our analysis shows that the government can save \$1.5 billion by building larger new schools. The government can also make better use of its existing assets by expanding the built capacity of existing schools and building larger new schools. One consideration when building larger schools is making sure students are not travelling much longer distances to get to school.

Recommendation 4

By 2030, expand TAFE campuses in Melbourne's west, north and south-east growth areas, and some large regional centres, to train more students to fill skills gaps, especially in construction, energy and health.

By 2030, TAFE campuses in Melbourne's west, north and south-east growth areas, and some large regional centres, will need more space to train more students, especially in sectors with skills shortages such as construction and health.

The Victorian Government should work with TAFE institutes to confirm the best places to add space. Wherever possible, it should build more facilities on existing TAFE sites, unless adding a campus to an area with no TAFE facilities. These campuses should be close to public transport so people can get there easily, and near jobs and other services to attract more students. Potential locations include:

- Victoria University in partnership with Gordon TAFE – Werribee campuses
- Chisholm TAFE – Berwick campus
- Melbourne Polytechnic – new campus in the Craigieburn to Kalkallo corridor
- Gordon TAFE – Geelong campuses
- Federation University – Ballarat campuses
- Bendigo Kangan Institute – Bendigo campuses
- Gippsland TAFE – Latrobe Valley campuses.

We estimate that it would cost between \$1.9 to \$2.5 billion over the next 12 years to expand these campuses.²¹ The Victorian Government can increase the Building Better TAFE Fund to deliver them. The Australian Government can also fund some of this through the National Skills Agreement.²² In 2023, the Australian Government agreed to invest \$3.1 billion in Victoria to increase access to Victoria's vocational education training sector.²³

Some TAFE campuses have land which might not be required for future growth. Some TAFE institutes might reduce the footprint of some of their campuses or combine their assets on a smaller site. The upgrade of the Chisholm TAFE campus in Frankston is an example of this. Any proceeds from divestment can help offset the costs of new facilities.

Prioritise government investment and assist private and not-for-profit investment in kindergartens

Kindergartens provide early education for children in Victoria. Kindergarten programs offer learning experiences and activities for 3- and 4-year-old children. These programs are led by qualified early childhood teachers and are offered in a variety of settings. This includes long day care centres where the kindergarten program is integrated with a full day of education and care. Or they can be delivered at a standalone kindergarten, usually on specific days and at set times.

Kindergarten programs can be delivered by different operators, including the Victorian and local governments, the not-for-profit sector and the private sector. Kindergartens are usually located in small, 2 to 3 room buildings, close to primary schools and other community services. Kindergarten operators can also co-locate their facilities at primary schools or in other community infrastructure. This produces more social and environmental benefits than locating them in isolation.²⁴ Melbourne residents typically have a kindergarten near their home, but families in rural and remote areas often must travel further to reach one.

Early childhood education delivers better life outcomes

Neuroscience research shows that early education helps children's brains develop better.²⁵ Children's early relationships, experiences and environment all affect the development of neural pathways in their brains. This brain development has a long-lasting influence on children's health, wellbeing, behaviour and learning.²⁶

Children have better long-term cognitive, social and emotional abilities if they attend 2 years of high-quality kindergarten. It especially helps children from disadvantaged backgrounds.²⁷ Early childhood professionals develop positive relationships with children in quality early childhood education programs, which improves the children's educational outcomes. These relationships also positively affect children's social and emotional wellbeing.²⁸ Children who need extra support benefit the most from taking part in kindergarten programs. This is because they can participate more often in learning experiences than they otherwise would.²⁹

The community receives \$2 of value for every \$1 invested in early childhood education.³⁰ This is because the skills that children develop at kindergarten help them perform better at school. In turn, this better school performance helps them earn more in adulthood, and use fewer health, welfare and justice services during their lives, as Table 1 presents.³¹

Table 1: Long term financial benefits from early childhood education investments

For students	For parents and carers	For government	For businesses
Better school achievement	Able to participate in paid work, or work more hours	Reduced unemployment	More qualified workforce
Higher educational attainment	Higher earnings	Less demand for health and justice services	Higher productivity
Higher potential lifetime earnings		More taxes received	

Source: The Front Project and PwC, '[A smart investment for a smarter Australia: economic analysis of universal early childhood education in the year before school in Australia](#)', June 2019, pp 30-42.

The many economic benefits of early childhood education take a long time to realise. Children who participate in early childhood education today will start working almost 2 decades later. On average, they will work for another 40 years or more. Some of the longer-term benefits, such as health-related benefits, also happen later in life.³²

Victoria has many different kindergarten providers

Several different providers deliver kindergarten programs. They include sessional kindergartens provided by local government, the not-for-profit sector and the private sector, including long day care centres that offer kindergarten programs. Long day care centres are provided by a mix of for-profit, not-for-profit, family, local and Victorian government operators.

Kindergartens directly operated by the Victorian Government are relatively new. The government has committed to deliver 50 government owned and operated early learning and childcare centres. Kindergarten infrastructure is also delivered by other operators, including local government, not-for-profit and for-profit providers. The infrastructure owner can sometimes be different to the provider of the kindergarten programs. For example, some local governments own kindergarten buildings and engage not-for-profit providers to deliver the programs to children.

In 2024, private for-profit providers delivered 54% of early years services in Victoria. Not-for-profit providers delivered 31% of services, government and non-government schools provided 7% of services, and the remaining 8% are operated by state or local governments.³³ Since 2013, services delivered by private and not-for-profit providers have grown faster than others. This means they deliver a higher proportion of services than in the past.³⁴

Private and not-for-profit providers delivering kindergarten programs decide where to locate their services and what fees to charge. Their decisions largely decide the availability of kindergartens, beyond those kindergartens that the Victorian and local governments provide.

The Victorian Government has eligibility criteria that service providers must use when prioritising enrolments.³⁵ There are 5 categories of high priority children:

- children at risk of abuse or neglect, including children in out-of-home care
- aboriginal and/or Torres Strait Islander children
- asylum seeker and refugee children
- children who are eligible for the kindergarten fee subsidy, which includes some children from families receiving income support

- children with additional needs, such as children who require additional assistance to participate in kindergartens, or children who have an identified specific disability or development delay.³⁶

This priority of access policy is one way the government manages access to early childhood education, particularly where limited kindergarten places are available.

Disadvantaged places have fewer kindergartens

Generally, families experiencing disadvantage can access fewer early childhood education and care programs.³⁷ Private long day care providers more often choose to operate in higher socio-economic areas. They can usually charge higher fees in these places, even if they face more competition. This means families living in more disadvantaged areas typically have fewer childcare places nearby.³⁸ Families can receive both free kindergarten through the Victorian Government's Best Start, Best Life reforms and the Australian Government Child Care Subsidy in long day care settings.

The Australian Competition and Consumer Commission completed an inquiry into childcare services in December 2023. It found that for-profit long day care centres charge higher average hourly fees compared to not-for-profit operators.³⁹ This means that people pay more for early childhood education in places that mainly have private providers. This can mean that some private long day care centres are not a suitable service to meet kindergarten needs in lower income areas.

If only private providers offer new early childhood education and care programs, they are more likely to deliver those programs in higher socioeconomic areas, at a premium price. Productivity Commission analysis of data from long day care providers suggests that private providers are less likely to operate in lower socioeconomic areas, including regional areas.⁴⁰ Centres in these relatively disadvantaged places were usually less profitable.⁴¹ Government investment in kindergarten places in disadvantaged areas can improve access and help deliver kindergarten services to children most likely to benefit from participating.

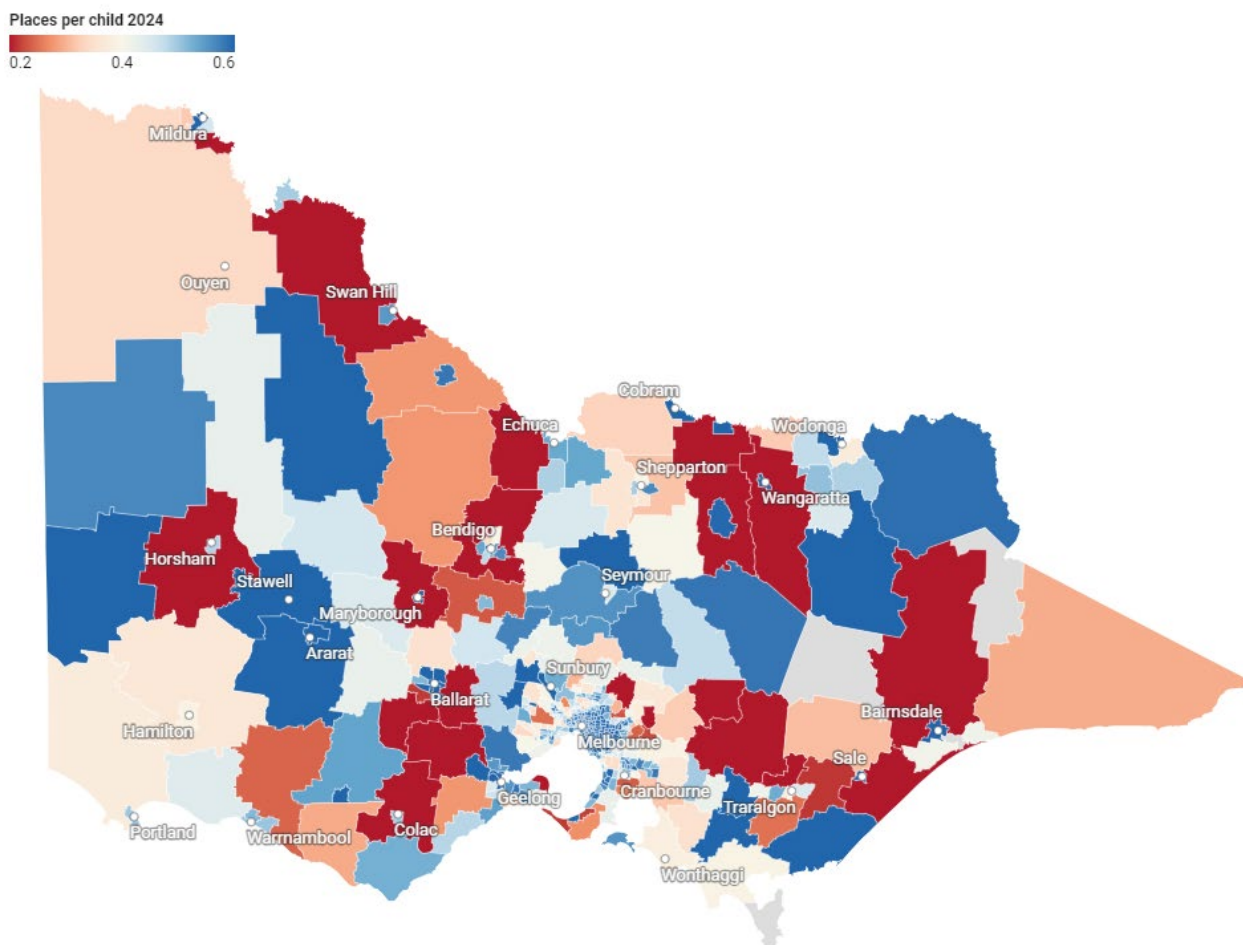
Parts of regional Victoria are 'childcare deserts'

Mitchell Institute research shows that certain parts of Victoria are 'childcare deserts'. These are locations that have more than 3 children for every childcare place.⁴² People living in rural and remote areas are more likely to live in a 'childcare desert'. The Mitchell Institute defines these as places with fewer than 0.4 places per child.⁴³ Figure 1 shows the ratio of childcare places to eligible children in Victoria. Parts of Victoria that have fewer childcare places available have a lower number. These tend to be the more rural and remote parts of Victoria. The research also found that access to childcare is associated with the socioeconomic status of the area. More disadvantaged areas have fewer childcare options and worse access to early years education.⁴⁴

Regional Victoria has around 55,000 places for early years education at long day care centres and sessional kindergartens, compared to almost 180,000 places in Melbourne.⁴⁵ Over 30% of the places in regional Victoria are at sessional kindergartens that are mainly operated by not-for-profit providers and local governments.⁴⁶

Our modelling shows these kindergartens will fill up over the next 10 years.⁴⁷ Families in these areas will need more places and programs nearby for their children to be able to participate. The Victorian Government can address this by providing kindergarten infrastructure and early education services in places where the private sector is less likely to invest. This includes sessional kindergartens.

Figure 1: Childcare places for each child by SA2 in Victoria



Source: P Hurley, M Tham and H Nguyen, 'Mapping the deserts: Childcare accessibility in Australia', Mitchell Institute, Victoria University, 20 August 2024, accessed 16 September 2024.

More kindergartens can help meet extra demand

The Victorian Government is already delivering its Best Start, Best Life reforms. These reforms include:

- a free kindergarten program for Victorian 3- and 4-year-old children
- the establishment of 3-year-old kindergarten programs, which were free to all Victorian 3-year-olds for at least 5 hours each week from 2022, and will increase to 15 hours each week by 2029⁴⁸
- 4-year-old kindergarten transforming into a new universal program called pre-prep, which will begin gradually rolling out from 2025 until 2036,⁴⁹ and will be free to all Victorian 4-year-olds for 20 hours each week by 2034, increasing to 30 hours each week by 2036⁵⁰
- the construction of 50 Victorian government-owned and operated early learning centres (see breakout box)
- investments in new kindergarten infrastructure, upgrades and maintenance
- investments to attract, upskill and retain early childhood teachers and educators.⁵¹

More children have enrolled in Victorian kindergartens since the government announced these reforms.

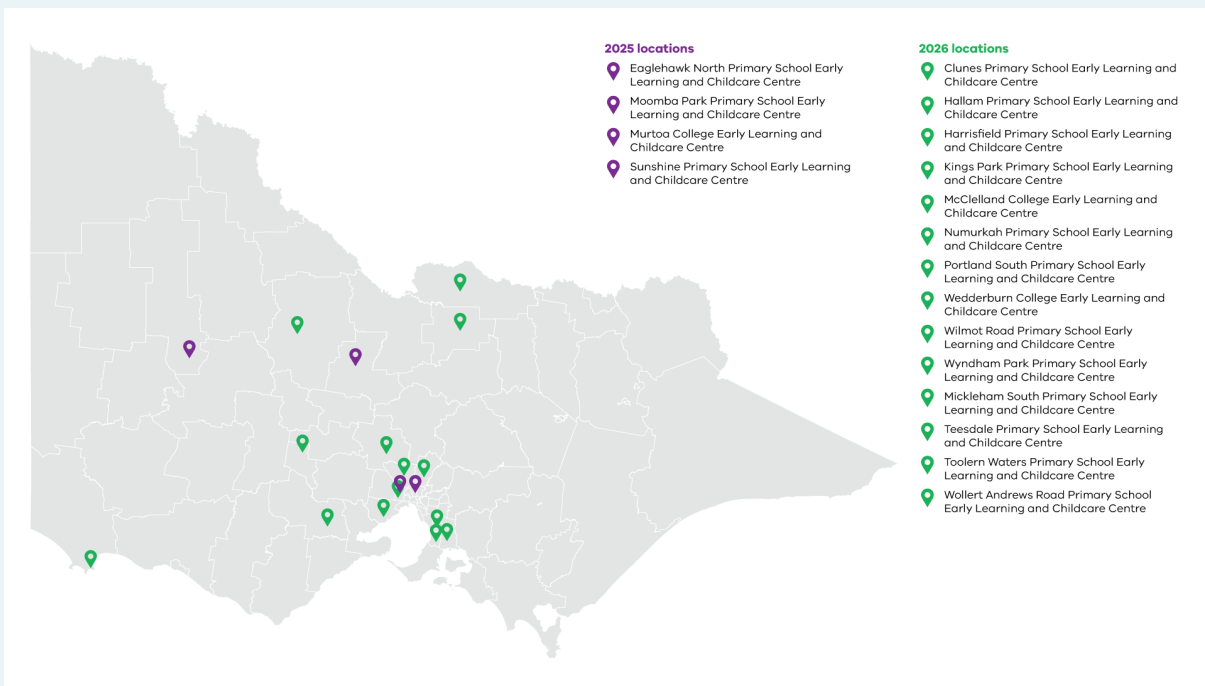
50 new early learning and childcare centres

The Victorian Government has committed to building 50 new early learning and childcare centres. It will build them in communities where they are needed most. The government will own and run the centres. The centres will offer childcare, 3-year-old and 4-year-old kindergarten, and will include 4-year-old pre-prep programs as they roll out across Victoria.⁵² Some of the new centres will be co-located with primary schools.

The government will open 4 new centres in 2025 and 14 in 2026. Locations across Victoria have been confirmed for the remaining 32 centres.⁵³

These 50 new early learning and childcare centres are a good start towards meeting future demand for kindergartens, but we estimate that more kindergartens will be needed by 2036.

Image below: Centres opening in 2025 and 2026 (source: Victorian Government)



Victoria has around 4,700 services delivering early childhood education and care and outside school hours care.⁵⁴ But the demand for kindergartens will grow as the number of young children grows, and more of them participate in kindergarten programs due to the reforms. By 2036, we project Victoria will need another 138,000 kindergarten places.⁵⁵ Existing and future planned sessional kindergartens and long day care providers can meet some, but not all, of this demand. We estimate Victoria will need about 900 new kindergartens by 2036 to provide enough places to enrol all these children.⁵⁶ Most of the demand for kindergarten places is being driven by the recent government policy changes to increase hours for 3- and 4-year-olds.

By 2036, we project Melbourne's growth areas will need over 40% of the new kindergartens. Melbourne's middle suburbs will need about 25% of them.⁵⁷ These projections are based on the *Victoria in Future* population projections released in 2023.

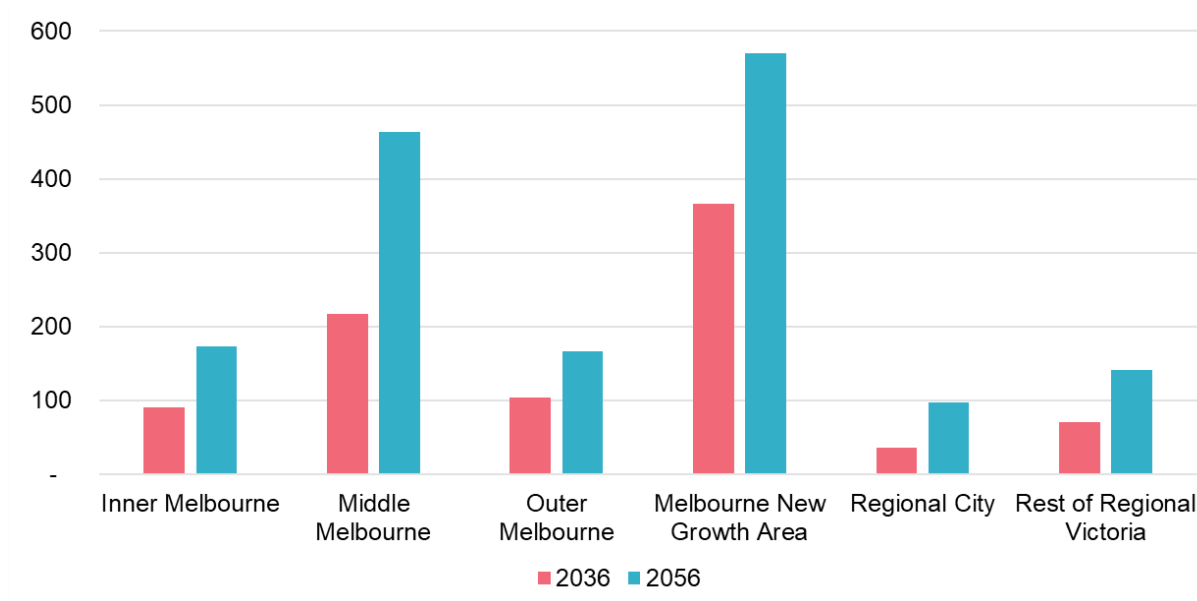
The Victorian Government released housing targets for each local government area in 2024.⁵⁸ Achieving these targets would mean that 70% of new homes would be in established areas in the future.⁵⁹ This would be a shift from current trends and result in a different population distribution compared to the *Victoria in Future 2023* projections. Our research shows that more compact cities offer Victorians a better quality of life and more choice. We have previously recommended that the government use a new plan for Victoria to reinforce growth in established areas.⁶⁰

In the short term these policies are not expected to change where new kindergarten infrastructure is needed. In the medium to longer term the government should consider how it can facilitate the private and not-for-profit sectors to plan and deliver more kindergartens in established areas of Melbourne and regional cities.

The education department allows one kindergarten room to have a maximum of 33 children.⁶¹ Our modelling assumed new kindergartens would have 3 rooms. This is larger than the previous standard of 2 rooms. We used this assumption because 3 room kindergartens allow providers to offer more programs and more efficiently allocate service hours during each week. They also allow new kindergarten infrastructure to be built and used more efficiently. Kindergartens with 3 rooms can enrol more than 99 children depending on how they do their programming of weekly hours. For example, some providers offer mixed age group kinder programs on 3 days of the week, and 2 programs on the other 2 days to accommodate more children.

If we project our model to the year 2056, it estimates kindergarten enrolments will grow by 209,000 children. This would require approximately 1,600 new 3-room kindergartens.⁶² But if new kindergartens are built at the previous 2-room standard, then Victoria would need about 2,400 new kindergartens.⁶³

Figure 2: Estimated number of new kindergartens needed by 2036 by functional urban area



Source: The Centre for International Economics, *Part 2: Kindergarten provision projection*, 2024.

The Victorian Government delivers some new kindergartens

The early childhood education system involves the participation of national, state and local governments, and not-for-profit and private service providers. In the past, the Australian and Victorian governments have mostly funded kindergarten services. Service providers typically built and maintained the infrastructure.⁶⁴ Local governments also planned, built and operated many of Victoria’s early childhood education services.⁶⁵

The Best Start, Best Life reforms have meant Victorian Government has needed to invest to support infrastructure expansion in the early childhood education sector. Since 2019, the government has funded many kindergarten infrastructure projects in regional areas. It has also co-located new kindergartens on government school sites in Melbourne’s growth areas.⁶⁶ These are typically in locations that have fewer private providers.

The Victorian Government supports expansion of kindergarten infrastructure through several delivery streams. These include Victorian Government-delivered projects (for example, building kindergartens on school sites and using modular kindergarten buildings) and sector-delivered projects (using Building Blocks Partnerships and Building Blocks Grants). The government has built or expanded 60 kindergartens on school sites as part of its commitment to deliver 180 government-owned kindergartens to be built on government

school sites wherever possible.⁶⁷ Local governments or not-for-profit providers will lease and operate these kindergartens.

Building Blocks Partnership are in-principle agreements between the Department of Education and a local government, large not-for-profit organisation, or non-government entity that facilitate co-investment in a pipeline of projects to address long-term kindergarten demand. These partnerships can allow the government to work closely with large providers to plan a longer-term pipeline of projects. The department has agreed 17 Building Blocks Partnerships that include 106 new and expanded kindergartens, providing up to 14,013 new kindergarten places. Under the partnerships, the Victorian Government has provided \$341 million, along with local government contributions of \$262 million.

Building Blocks Grants are also available for capital works to local government, non-government schools and not-for-profit community organisations that deliver kindergarten services.

But local governments might not build all the new kindergartens for children in their communities. A Municipal Association of Victoria survey found that Victorian local governments owned 45% of early years infrastructure.⁶⁸ This included facilities from which an external provider delivered services. Some local governments are selling their early childhood education infrastructure assets, while others have leased their buildings to private operators and hired them to provide kindergarten services.⁶⁹

Modular kindergartens

The Victorian Government's modular kindergarten program offers 1, 2 and 3-room template designs for kindergarten buildings and outdoor learning areas. The government delivers and funds modular kindergarten projects on behalf of Building Blocks Grants recipients. It might require grant recipients to pay a co-contribution if they want changes outside the standard designs. The Building Blocks Grant Guidelines define this scope.⁷⁰

Any non-for-profit kindergarten provider, including local governments, can apply for a modular kindergarten grant.⁷¹ Grant proposals using government or non-government land are eligible. For example, the government delivered a modular kindergarten project at Foster Primary School in 2023. The project was a collaboration between the local service provider Prom Coast Centres for Children, Foster Primary School and the education department. The single-room, 33-place modular building is used for 3 and 4-year-old kindergarten programs.⁷²

Other recent examples of new modular kindergartens:

- Eucalyptus Parade Kindergarten provides another 66 kindergarten places in Donnybrook.⁷³
- Holy Child Kindergarten is co-located with Holy Child Primary School in Dallas.⁷⁴
- Middleton Drive Kindergarten provides another 66 kindergarten places in Point Cook.⁷⁵
- Upfield Kindergarten provides 33 kindergarten places and is co-located with Dallas Brooks Community Primary School.⁷⁶

Image below: Eucalyptus Parade Kindergarten – modular kinder (source: Victorian School Building Authority)



Upgrading existing kindergartens can be challenging

Many older kindergartens in Melbourne's established suburbs are single-room facilities.⁷⁷ These kindergartens typically do not have enough space or flexibility to provide more kindergarten sessions. Some are changing their programs to help accommodate more children. For example, they might provide mixed aged groups programs.⁷⁸ But these changes are unlikely to create enough extra places to meet demand.

Much existing kindergarten infrastructure is also ageing and run down. A 2022 Municipal Association of Victoria survey found that 70% of council buildings used for early years education are more than 40 years old. In rural areas, 58% of the buildings are over 55 years old, compared to 32% in Melbourne.⁷⁹ Maintenance for ageing kindergarten buildings costs Victorian councils more than \$28 million each year.⁸⁰

Increasing the capacity of kindergartens operating in older buildings can require significant renovations. It might even require demolishing and rebuilding the facilities. The Municipal Association of Victoria found that over 300 kindergarten buildings need significant maintenance and upgrades.⁸¹ In some cases, conducting these works could affect the financial viability of some private or not-for-profit operators using the building, because they would have to close while the buildings are renovated or reconstructed.

The Victorian Government provides Building Blocks Grants for inclusion and improvements to kindergartens. This funding is to upgrade early childhood buildings and facilities and purchase equipment to provide safe and more inclusive environments for children of all abilities.

Target government investment in kindergartens

We modelled 4 different scenarios for state and local government investment in kindergarten infrastructure. This allowed us to compare the outcomes of different investment strategies. We used a scenario approach because the market might respond to the government's policy changes in different ways. The scenarios might be more or less plausible. But the difference between scenarios can help us analyse how much extra the Victorian Government might need to invest.

We modelled 4 scenarios, which assumed that:

- 1 historical infrastructure funding shares continue in the future, including that the Victorian Government funds around 15% of new kindergarten infrastructure
- 2 Victorian and local governments target kindergarten infrastructure funding at lower socio-economic areas
- 3 only the Victorian Government targets kindergarten infrastructure funding at lower socio-economic areas
- 4 the Victorian Government funds all additional future kindergarten infrastructure.

In these scenarios, the Victorian Government's funding share for kindergarten infrastructure ranges between 16% and 99%. For scenarios 2 and 3 the funding share ranges between 35% and 63% and depend on how much funding local governments contribute.

Delivering 900 kindergartens by 2036 will cost an estimated \$17 billion in today's dollars, as illustrated in scenario 4. Our modelling shows that the cost to the Victorian Government would only be \$2.8 billion if it only contributed its historical funding share, as scenario 1 shows. If the government targets kindergarten infrastructure funding to lower socio-economic areas, it will cost between \$6.1 and \$11 billion, as scenarios 2 and 3 illustrate.⁸²

How we modelled demand for kindergartens

Our model identifies the high-level need for new kindergartens across Victoria. This focuses on how changes to investment in infrastructure affects different parts of the state. It does not reflect the various complex inputs and decisions that occur at the site assessment level for a single kindergarten. The Department of Education has more complicated models and methods to assess individual kindergartens and the local service providers who run them.

Our model looks at demand for large subregions of Victoria, using Statistical Area 3 (SA3) geography from the Australian Bureau of Statistics.⁸³ These are usually a small group of suburbs. We used population projections from the Department of Transport and Planning (*Victoria in future 2023*) to tell us how many kindergarten-aged children (aged 3 and 4 years) are expected to be living in Victoria in 2036 and 2056.

We used the Department of Education’s Kindergarten Infrastructure Service Plans to project future kindergarten enrolments until 2029 that are driven by population growth and the 3-year-old policy reform. These plans were prepared prior to the announcement of the 4-year-old pre-prep reform, so we used Australian Bureau of Statistics data on 4-year-old enrolments in kindergarten and childcare to estimate the additional demand from these reforms.

We used data from the National Quality Standard produced by the Australian Children’s Education and Care Quality Authority to estimate the current and historical market shares of providers offering kindergarten or childcare services in Victoria. We made assumptions on the future market and funding shares for each sector for 4 scenarios, given the inherent uncertainty in the sector.

After we estimated future demand for kindergarten enrolments, we considered how many of these places could be met in existing kindergartens. To estimate existing supply, we used data from the Kindergarten Infrastructure Service Plans and included the Victorian Government commitment for 50 new early learning and childcare centres and commitments for new early learning centres from non-government schools.

Once these existing kindergartens are filled up, new kindergartens will be needed. Our model estimates how many additional kindergartens will be needed to meet future demand in 2036 and 2056. We then use the assumptions of funding shares to estimate the potential cost to each sector to deliver the required kindergartens. These assumptions are shown in Table 2 below.

For a more detailed explanation of the model’s methodology, see the Centre for International Economics’ *Kindergarten provision projection* technical report.

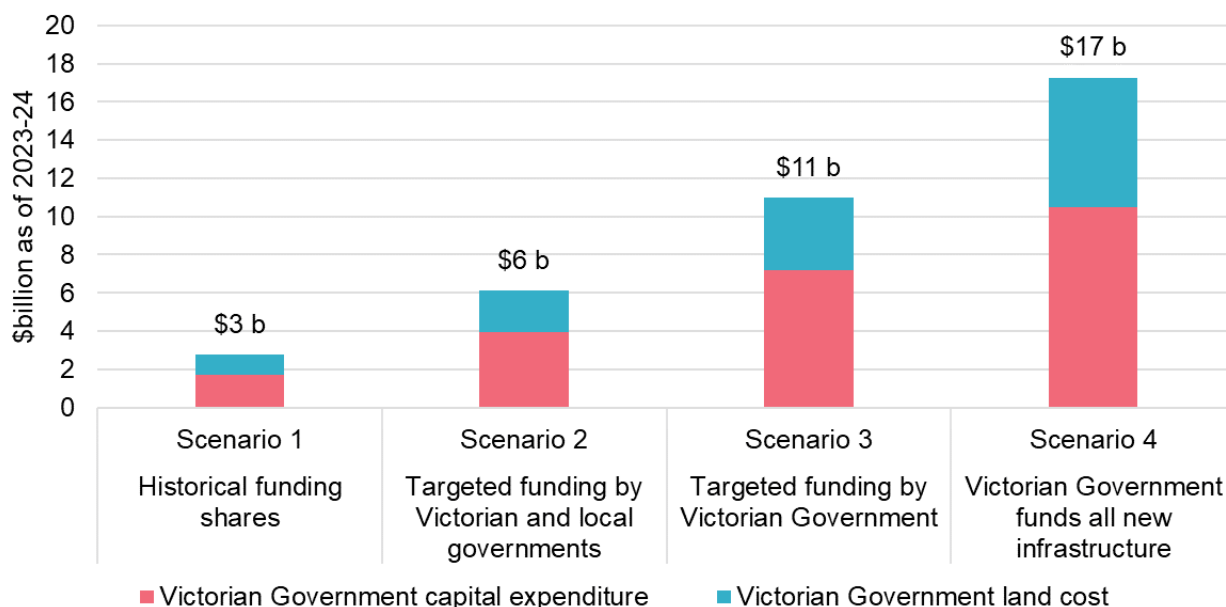
Table 2: Funding share assumptions used in kindergarten demand model

Provider Management Type	Funding source		
	Victorian Government	Local Governments	Other
State government schools	100%	0%	0%
State and local government managed	70%	10%	20%
Private not-for-profit - community managed	25%	25%	50%
Private not-for-profit - other organizations	25%	25%	50%
Catholic / Independent schools	50%	0%	50%
Private for-profit	0%	0%	100%

Source: The Centre for International Economics, *Part 2: Kindergarten provision projection*, 2024, p. 16.

Note: Other funding sources include investments from the private sector and developer contributions to private or not-for-profit state and local government managed facilities.

Figure 3: Estimated cost to government for kindergarten infrastructure by 2036



Source: The Centre for International Economics, *Part 2: Kindergarten provision projection, 2024*.

Scenario 1 relies on the private and not-for-profit sector, and local governments, delivering most of the new kindergarten infrastructure. This would cost the Victorian Government much less. But it would likely mean people had less equitable access to kindergartens. Lower socio-economic and rural areas would likely have fewer places in kindergarten programs than needed for universal access, because the private sector would likely deliver fewer services in these places.

In contrast, a combination of private, not-for-profit and Victorian and local government investment can meet the different needs of families and children in different parts of Victoria. If properly coordinated, it can make more effective use of government funding in places in which other providers are unlikely to build new kindergartens.

Based on our scenarios, we estimate that it might cost the Victorian Government between \$6.1 billion and \$11 billion to deliver more kindergarten infrastructure in places with the greatest need, and still meet the targets for the Best Start, Best Life reforms by 2036.

Our modelling estimates that kindergarten infrastructure will cost the Victorian Government \$3.9 to \$7.2 billion by 2036 (for capital costs, excluding the value of all land). If the government needs to buy land for these kindergartens it might cost an extra \$2.2 to \$3.8 billion by 2036. The funding needed might be lower if the government can encourage more investment from other investors or governments, construct kindergartens more efficiently, or use existing land rather than buying it.

This cost range is large as there is some uncertainty in how much infrastructure will be delivered by the private and not-for-profit sector, and how much the Victorian and local governments will need to deliver to fill any gaps. We have used scenarios that assume different funding levels by the Victorian Government. This cost range assumes the government provides infrastructure for kindergartens that are needed in lower socio-economic areas, either split 50% with local government (lower cost) or 100% funded by the Victorian Government (higher cost).

An area's demographic profile can change rapidly, particularly in new suburbs where young families form. Demographers cannot always accurately predict the exact places where babies are born and where pre-schoolers will live. If demographic patterns turn out to differ from official projections, governments do not have much time to act on the information. For example, government might only have a short window to respond to sustained changes in international or interstate migration, or fertility rates. Children need kindergarten places a few years after they are born. This is a tight timeframe for constructing infrastructure. Options like modular or relocatable buildings can allow governments to respond more quickly to

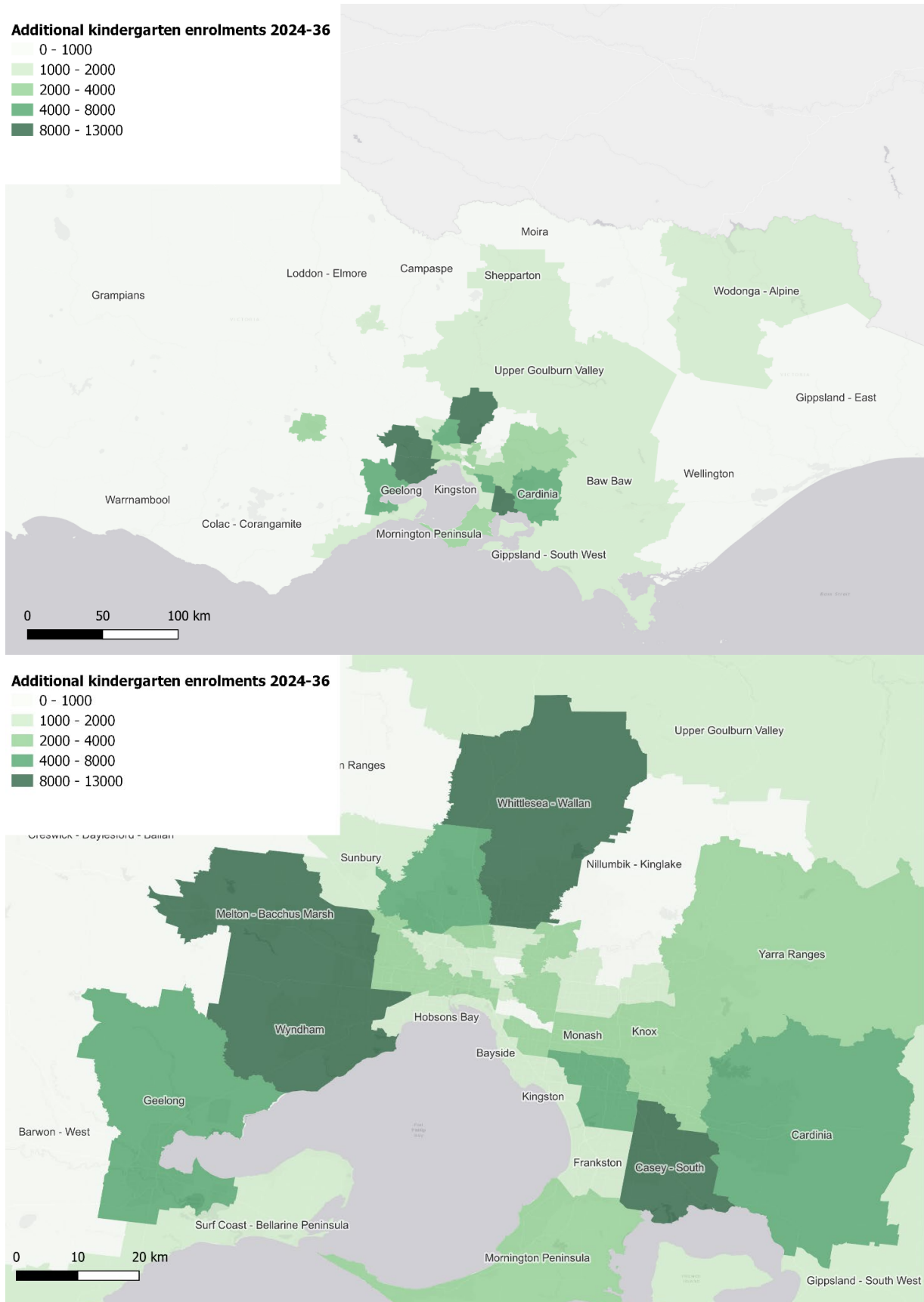
demographic change. Standardised kindergarten designs including modular buildings can also reduce design and building costs for the government.

Government investment in kindergartens can also compete with other investors. If private or not-for-profit investors observe governments investing in places they are considering, it might discourage them from doing so. But if governments target their kindergarten infrastructure investments in places where other sectors are unlikely to, then they are less likely to discourage other investment. The children that receive the greatest benefits from participating in kindergarten programs are also more likely to live in these same communities.

Figure 4 shows the projected growth in kindergarten enrolments by 2036 across Melbourne and Victoria based on the *Victoria in future 2023* population projections. This shows fast growth in the number of young children in Melbourne's new suburbs in the west, north and south-east and in some regional cities. The Victorian Government can invest in kindergartens in these places, among others, because we expect many young families will live there, even if Victoria's cities increase in density.

The Victorian Government can also keep supporting and responding to local government investment in kindergarten infrastructure. Local governments already own much of Victoria's kindergarten infrastructure. Local government-owned kindergarten infrastructure will typically keep offering kindergarten programs, even if they engage external providers to deliver the services.⁸⁴ Large not-for-profit organisations with mature governance and operating systems have increasingly been engaged to operate kindergartens owned by local governments. The National Quality Framework provides helpful guidance on good governance and operations to all providers in the sector.

Figure 4: Projected growth in kindergarten enrolments by 2036



Source: The Centre for International Economics, *Part 2: Kindergarten provision projection, 2024*. Note enrolments are shown for 15 hour equivalent places.

Note: These future enrolment projections are based on the Department of Transport's Victoria in Future 2023 population projections.

Facilitate the market for kindergartens

Recommendation 1

Facilitate markets for private and not-for-profit investment in kindergarten infrastructure. Share regularly updated information about the demand for and supply of kindergarten places.

Recommendation 2

Immediately publish priorities for government investment over the next 5 years to deliver kindergartens in communities that will have the greatest need in 2036.

The Victorian Government can make the most of its funding in places where other market participants are unlikely to deliver kindergartens. But in places where other providers are already delivering kindergarten infrastructure and programs, the government should facilitate them to keep doing this. This involves continuing to build and maintain trusted and transparent relationships with private and not-for-profit providers, and local governments, to encourage information sharing.

The Victorian Government should outline its priorities and provide signals to the market for where government is planning to invest in infrastructure, when that investment should happen and what would trigger future investment. This should include kindergartens on school sites.

The government should give information about the demand and supply of kindergarten places in a timely manner and update it regularly. This would encourage planning and investment from all sectors. The current kindergarten infrastructure service plan process (see breakout box) is a good start.⁸⁵ The government should develop an online platform to show statewide information from all sectors and make information accessible to stakeholders.

What are kindergarten infrastructure service plans?

Kindergarten infrastructure service plans are documents prepared by the Victorian Government and each of the state's 79 local governments. The plans allow information to be shared and agreed on regarding the current supply and demand for kindergarten places in each local government area, forecast demand for 3- and 4-year-old kindergarten and expectations about how this demand will be accommodated over the next 10 years.

A kindergarten infrastructure plan is not a funding document and does not commit any party to fund specific projects. They are used to plan future kindergarten infrastructure. They also provide a signal to the broader market about expected unmet demand for kindergartens in specific locations. The Victorian Government expects that future investment requests and decisions through Building Blocks funding would align with the relevant local infrastructure plan.

The infrastructure plan for each of the 79 local government areas is publicly available to download. These were prepared before additional kindergarten program hours were announced for 4-year-olds so do not yet consider the additional demand. The Victorian Government is currently working with local governments to update the kindergarten infrastructure plans.

The Victorian Government should maintain transparency and share information between providers and government. They should support open dialogue and ensure information sharing goes both ways. This should allow providers and local government to make informed decisions about where and when they invest. This approach will also allow more lead time to support co-investment and building integrated hubs with other local government services.

Better access to information about the market allows providers and local governments to:

- decide where and when to invest
- explore and align co-investment
- collaborate on building design, such as integrated hubs that house other government services alongside kindergartens.

The Department of Education can take the lead in coordinating and facilitating investment in the kindergarten sector. Local governments can also be involved. The Victorian Government can also consult with the Australian Government because of its childcare funding responsibilities, which deliver similar services and can also use kindergarten infrastructure.

Demand for kindergartens in Mitchell Shire

Mitchell Shire Council assessed the future demand for kindergarten infrastructure in its local area. The council will deliver 23 kindergarten projects on land allocated through new residential development and by expanding existing facilities. It estimates the local government area will still have a shortfall of 85 kindergarten rooms by 2041.⁸⁶

The council's strategic partnerships with the Department of Education to deliver kindergartens on school sites can help meet some of this shortfall. Other options include increasing the planned size of future community centre sites, delivering integrated pavilion and kindergarten models at sport and recreation sites, and by expanding kindergartens using land on existing sites.

But the council expects the suburb of Beveridge will still have a shortfall, because government forecasts estimate the number of kindergarten-aged children will grow quickly over the next 10 years. The council wants the Victorian Government to buy more land in Beveridge to help secure sites for future services.⁸⁷

Image below: Wallan Kindergarten (source: Victorian School Building Authority)



Identify schools to enlarge and confirm new school sites

Children and young people attend school to gain an education and develop physically, cognitively and socially. Those who regularly attend school and complete year 12 or an equivalent qualification have better health, are more likely to work, and earn higher wages.⁸⁸

Good design in early learning, primary, secondary and tertiary education campuses supports student academic performance. It also helps students and staff enjoy their experience of teaching and learning and stay engaged.⁸⁹ New learning spaces can be built for flexible uses in the future, allowing teachers to easily change the layout of the classroom to best fit their students. It also allows new technologies to be more easily retrofitted as they become available.⁹⁰

Children must have a place at their local government school

Schooling is compulsory in Victoria for children and young people aged from 6 to 17 years, unless they are granted an exemption.⁹¹ Every Victorian student has a right under the Victorian *Education and Training Reform Act 2006* to enrol at their designated neighbourhood school, or they may enrol at another school if it has enough spare capacity.⁹²

The Department of Education uses different techniques to manage and respond to increasing demand for schools so that every child can go to their local school. For example, the Department of Education can recommend the Victorian Government invest to build new schools or increase the built capacity of existing schools. The Victorian Government has invested \$470 million into repairs, maintenance and refurbishment of school infrastructure in 2024.⁹³ The department also uses policy approaches to manage demand, such as the application or amendment of school zones.⁹⁴

Without these measures, some children and young people might struggle to get a place in a school near their home and would have to travel further to attend school. Schools can also become overcrowded in places where the number of school-aged children rapidly increases.

Enlarging existing schools or building new ones to meet demand can reduce how often the government must enforce or change school zones to manage enrolments, among other methods.

Victoria will need more schools

The Victorian Government has almost completed its 2018 election commitment to open 100 new schools. It has now opened 75 new schools and is scheduled to open 25 more by 2026.⁹⁵ But it has not announced any decisions or funding to deliver new schools after 2026.⁹⁶

To estimate the demand for schools after 2026, we used the Victorian Government's 30-year Victoria in Future population forecasts to the year 2056.⁹⁷ After making some assumptions about the likely proportion of students that might attend non-government schools, the spare capacity in existing schools, and the availability of extra land on existing sites, our model then estimated how many extra government schools might be needed.

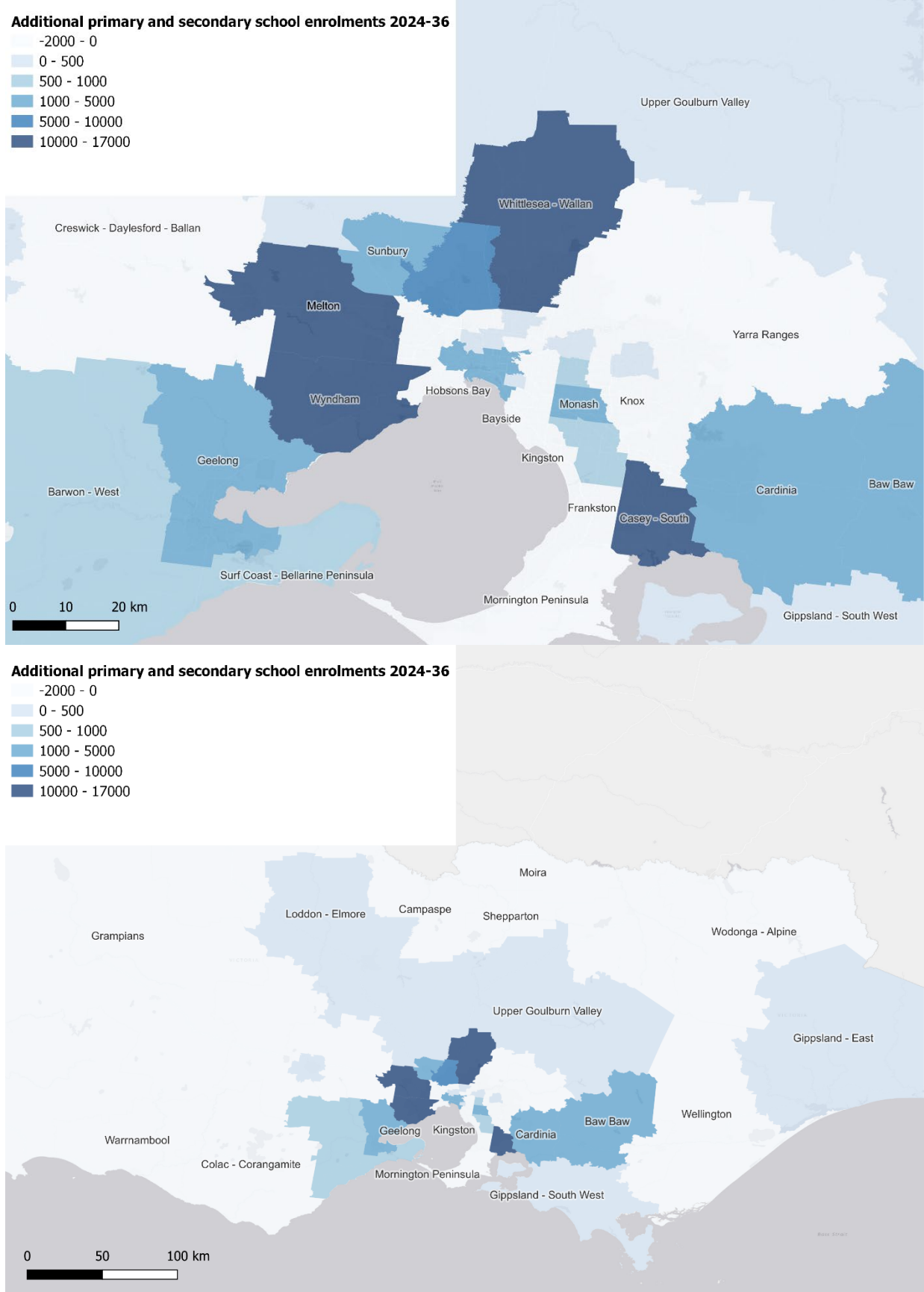
Figure 5 shows the projected growth in school enrolments by 2036 in Victoria. It shows strong growth in enrolments in Melbourne's new suburbs in the west, north and south-east. These are the highest priority places where the Victorian Government should direct its investment in schools in the next 12 years.

Especially in the longer term, Melbourne's inner and middle rings suburbs will also need more government school capacity. If Victoria's school-aged population grows as forecast to 2056, inner and middle suburban schools will need many more places to accommodate all government school students. But if Victoria's school-aged population grows in different ways, these priorities will change.

In 2024, the Victorian Government released housing targets for each local government area.⁹⁸ Achieving these targets would mean that 70% of new homes would be in established areas in the future.⁹⁹ This would be a shift from current trends. Our research shows that more compact cities offer Victorians a better quality of life and more choice. We have previously recommended that the government use a new plan for Victoria to reinforce growth in established areas.¹⁰⁰

However, some schools in inner Melbourne and new suburbs are already running out of spare space for more students. More pressure will be placed on existing schools in inner Melbourne, especially those that do not have the space for relocatable classrooms, if more families with school-aged children choose to live there. The government can keep monitoring and responding to increases in the school-aged population in Melbourne's inner and middle suburbs so that all children can access their local schools.

Figure 5: Projected growth in primary and secondary enrolments in government schools by 2036



Source: The Centre for International Economics, 'Part 1: Primary and secondary school provision projection', 2024.

Note: These future enrolment projections are based on the Department of Transport's Victoria in Future 2023 population projections.

The government has many ways to cater for more students

The government can accommodate more students in schools by adding more relocatable buildings, expanding existing schools or building new and larger schools than in the past. The government's choices about how to cater for more students affects how many government schools are needed and how much they will cost.

Our model of school student growth analysed 5 different scenarios for meeting student demand. The scenarios used different combinations of school sizes and numbers of relocatable classrooms. This affected how many new schools are needed and the total construction cost of them all.

This scenario approach helped us assess the effects of different strategies for accommodating more government school students. We also conducted a sensitivity test in which more students chose to attend government schools, rather than non-government schools, compared to now.

The 5 scenarios we modelled were:

- 1 Historical:** this scenario models historical practices in relation to relocatable classrooms, standard new building sizes and typical school capacities (525 students for each primary school and 1,200 students for each secondary school).
- 2 Maximising existing school capacity:** this scenario models more capacity at existing schools by using more relocatable and permanent buildings, including multi-storey options in inner metropolitan areas.
- 3 Relocatable building limits:** this scenario limits relocatable classrooms to 20% of total school capacity, to test the assumptions on relocatable classroom capacity to understand how many new schools might be needed. Many regions currently use more than 20% of relocatable classrooms.
- 4 Larger new school designs:** this scenario adopts larger school sizes and vertical campuses in inner metropolitan areas (900 students for each primary school and 2,000 students for each secondary school).
- 5 Comprehensive capacity approach:** this scenario combines increased capacity at both existing and new sites to reduce the need for new schools and extra land.

How we modelled demand for schools

We have made broad assumptions to create a simplified model of school infrastructure demand and costs. We use this model to identify the high-level need for new schools across Victoria. Individual school site assessments might differ, considering the various complex inputs and decisions.

The Department of Education also uses different models and methods of addressing growth and planning for new schools that have not been considered in our analysis. These methods are more detailed and consider school zones and specific sites which we are not able to do with a state-wide model.

Our model looks at demand for large subregions of Victoria. We used Statistical Area 3 (SA3) geography from the Australian Bureau of Statistics.¹⁰¹ These are usually a small group of suburbs. We used population projections from the Department of Transport and Planning to tell us how many school-aged children there would be living in Victoria in 2036 and 2056.

More school-aged children means primary and secondary schools will have more enrolments. These additional enrolments can be accommodated either at existing schools or at new schools. Demand for government schools will vary in different parts of Victoria. In some places there may be more families with children, while in others there might be less. In some places, non-government schools might take these enrolments, rather than government schools.

Our model works by estimating future additional government school enrolments using population projections of school-aged children. We use data on existing schools to work out how much spare capacity there is in an SA3 which could be used to accommodate some students.

Then, if possible, additional relocatable classrooms are used to meet the additional enrolments that cannot be accommodated by existing school capacity. This is not possible in every region. For example some places may have existing schools that are site constrained, such as vertical schools in inner Melbourne.

After that, if ongoing demand is maintained and it is a practical solution, additional permanent capacity is added. This means expanding existing school buildings with either expansions or new buildings on the current school site. This may not be possible at every school within a region as our model averages across the whole region and does not look at every single school.

After this process, if ongoing demand is maintained and there are still more student enrolments that cannot be accommodated at existing schools, then new schools are required.

Table 3 shows the assumptions that we used in the ‘historical’ scenario for how future student enrolment growth is accommodated at existing and new schools. These assumptions vary by different regions and for primary and secondary schools. We have also varied these assumptions in each of the 5 scenarios outlined above.

Table 3: Assumptions used in schools model for historical scenario

Region	Existing school capacity	Additional relocatable buildings	Additional permanent buildings	New primary school	New secondary school
Inner Melbourne (high density)	Yes – excess existing permanent capacity + excess existing relocatable capacity (up to 40%)	No	No	Yes – for up to 650 enrolments ^a	Yes – for up to 1200 enrolments ^a
Inner Melbourne (other)			Yes – up to 25% of existing permanent capacity, and 0% for secondary schools in Melbourne New Growth Areas	Yes – for up to 525 enrolments ^a	
Middle and outer Melbourne		Yes – up to 20% of existing permanent capacity, and 0% for secondary schools in Melbourne new growth areas			
Melbourne new growth areas			Yes – up to 50% of existing permanent capacity		
Regional (cities and major towns)					
Rest of Victoria					

^a New school capacity is a mix of permanent and relocatable and can be adjusted to local requirements.

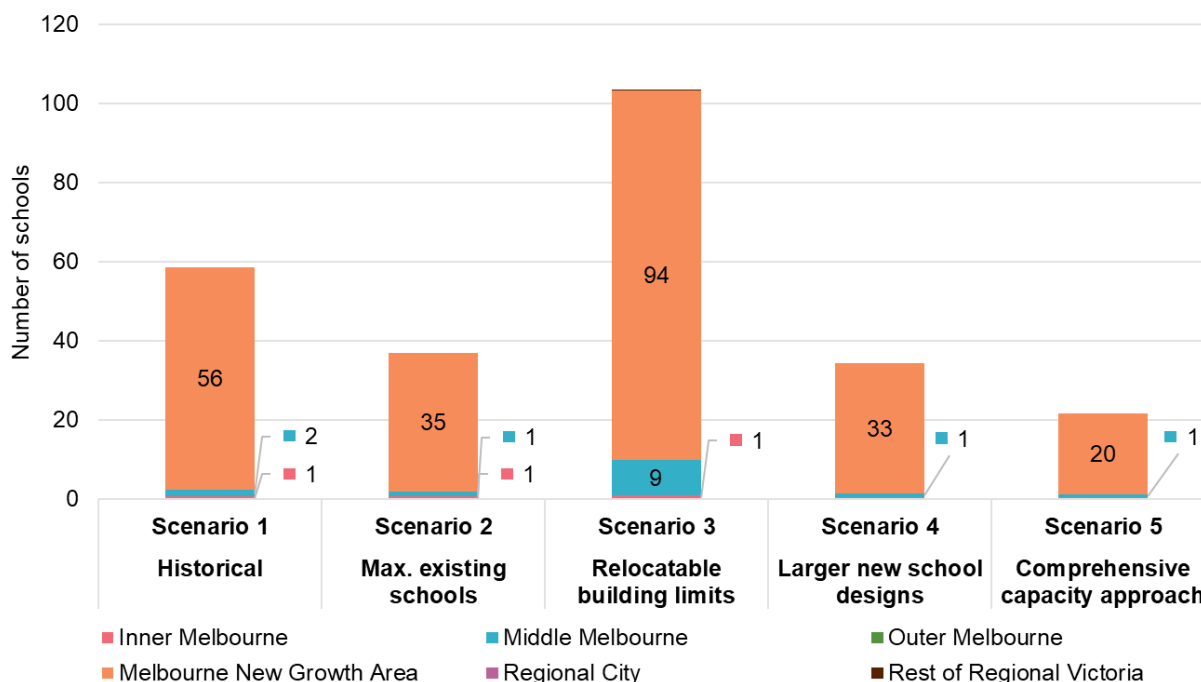
Note: Although 525 and 1200 capacity is assumed for new schools, the Department of Education may deliver new schools to different sizes, and these sizes may not be representative of what is ultimately delivered.

Source: The Centre for International Economics in consultation with Infrastructure Victoria and the Department of Education

Our modelling shows a large variation in the number of schools that Victoria will need in the future depending upon the approach the government takes. We estimate that Victoria will need between 21 and 104 new schools by 2036, depending on the size and distance between schools (see Figure 6). Victoria will likely need another 70 to 203 new schools by 2056.

A scenario of 34 new schools assumes that all new schools are built bigger than they are now (scenario 4). In this scenario a new primary school would have 900 students, and a new secondary school would have 2,000 students. A scenario with 59 new schools uses historical assumptions of 525 students for each primary school and 1,200 students for each secondary school (scenario 1).

Figure 6: Estimated minimum number of new schools needed in Victoria by 2036



Source: The Centre for International Economics, *Part 1: Primary and secondary schools provision projection, 2024*. Note: Based on Victoria in Future 2023 population projections.

We assume that children will keep attending government and non-government schools in the same proportions as today. These proportions are different in different parts of Melbourne and Victoria. In different areas, between 64% and 70% of primary school children attend government schools. And between 45% and 63% of secondary school children attend government schools.¹⁰² We largely assume these proportions stay the same in the future, but increase slightly between 2% to 4% depending on location.¹⁰³ This is based on historical trends of changing preferences for government schools, and the availability of non-government schools in different areas.

We assume that the government will provide enough school capacity for all students expected to enrol in government schools based on this share. We assume other school children will attend a non-government school, either a Catholic or independent school.

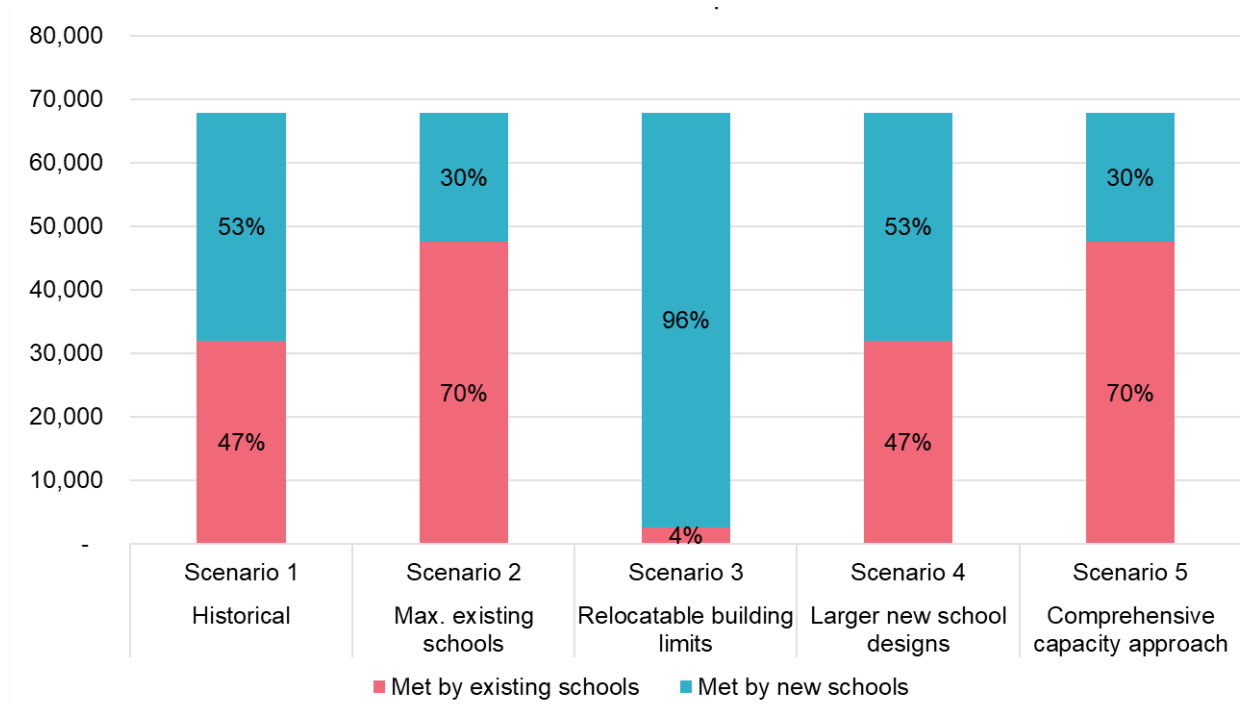
The government can accommodate extra students in two main ways. It can build new schools. Or it can use existing schools by using spare capacity or building extra classrooms at them. Figure 7 shows the differences between our scenarios between these 2 methods.

In the 'historical' scenario, existing government schools can take just under half of the extra students. This is by using up any spare capacity in schools now, and by adding more relocatable classrooms or expanding existing school buildings. The government builds new schools to accommodate the other half. In the 'larger new school designs' scenario, the proportions are the same, but the new schools are larger, so the government can build fewer of them.

In the 'maximising existing school capacity' and 'comprehensive capacity approach scenarios', the government creates extra capacity on existing school sites. It does this by using relocatable classrooms or constructing new permanent buildings at existing schools. This approach means up to 70% of new students are accommodated at existing schools.

In the 'relocatable building limits' scenario, only 4% of additional students can be accommodated at existing schools. In this scenario many more new schools would be needed.

Figure 7: Additional students at Victorian government schools in 2036



Source: The Centre for International Economics, *Part 1: Primary and secondary schools provision projection*, 2024

Melbourne's growth areas

Melbourne has many new suburban housing estates on the edge of the city. These suburbs have some of Victoria's fastest population growth rates. The government projects another 840,000 people will live in them by 2036.¹⁰⁴ In places with more children, schools will need more infrastructure so each child who wishes to attend a government school can do so.

The Victorian Government has published draft housing targets for each Victorian local government area. The government aims for 70% of new homes to be in established areas in the longer term.¹⁰⁵ But the government's current projections estimate that over 40% of Victoria's population growth in the next 10 years will still be in Melbourne's new suburban estates.¹⁰⁶ We estimate that most new schools and over 40% of the new kindergartens needed in Victoria by 2036 will be in Melbourne's new suburbs.¹⁰⁷

The government also projects that Melbourne's west, north and south-eastern growth areas will have the largest increase in demand for tertiary training in construction and healthcare. We estimate that local TAFEs in Melbourne's growth areas will need over 125,000 square metres of extra space to train workers with these skills in these 2 industries alone.

Mickleham Secondary College

Mickleham Secondary College is a new secondary school in the city of Hume. It opened in 2023 with 120 year 7 students only. The school will offer all high school year levels in 2028.¹⁰⁸

The first building phase created capacity for 525 students. A second phase is now under construction and will accommodate an extra 675 students.¹⁰⁹

The building stages were designed so that the school could open with everything it needs, but also have space to expand in the future as the local population grows.

Image below: Mickleham Secondary College (source: Victorian School Building Authority)

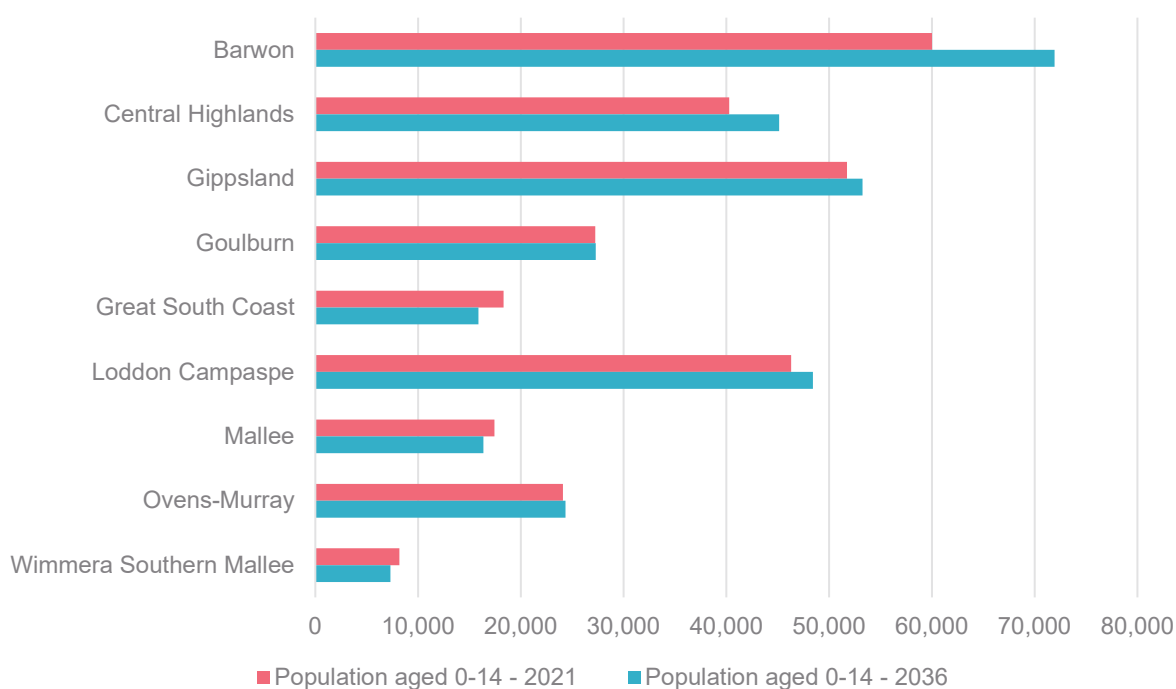


Some regional schools will have declining enrolments

Our modelling suggests that some government schools in regional and remote parts of Victoria could accommodate projected future enrolments to the year 2056 with relocatable classrooms or by adding extra buildings. Some schools will need to add new buildings on existing school grounds to accommodate growth, including in Geelong, Ballarat and Bendigo.¹¹⁰

Figure 8 shows the number of children the government projects will live in different parts of regional Victoria by 2036.¹¹¹ It shows some areas will have fewer children this age. This means schools in these places will have empty space. By 2036, they will have room for more students than are projected to live in the local area.

Figure 8: 2036 population projections for regional Victoria – ages 0-14



Source: Department of Transport and Planning, '[Victoria in future 2023](#)' [data set], DTF website, 2023.

Modelled scenarios vary in infrastructure costs

Our scenarios produce different cost estimates. The different costs depend on several factors:

- whether existing schools can accommodate extra students
- whether the government creates this extra space by installing relocatable classrooms, or by constructing more expensive new permanent school buildings
- Whether the government builds new and larger schools.

We estimate the total cost for new and expanded schools using a 'historical approach' (scenario 1) to be \$7.2 billion by 2036. This estimate includes land costs.

Our model estimated that school infrastructure would cost less if the government used more relocatable classrooms than it has historically. In the 'maximise existing schools' scenario (scenario 2), the government would use this technique so that existing schools accommodate 70% of extra students. This would reduce the cost to \$6.6 billion.

Our model also estimated that school infrastructure would cost less if the government built larger new schools. In the 'larger new school designs' scenario the cost was only \$5.7 billion (scenario 4). This would save the government \$1.5 billion compared to the 'historical approach' scenario. While each school is more expensive individually, the total cost is much lower because the government would build fewer new schools.

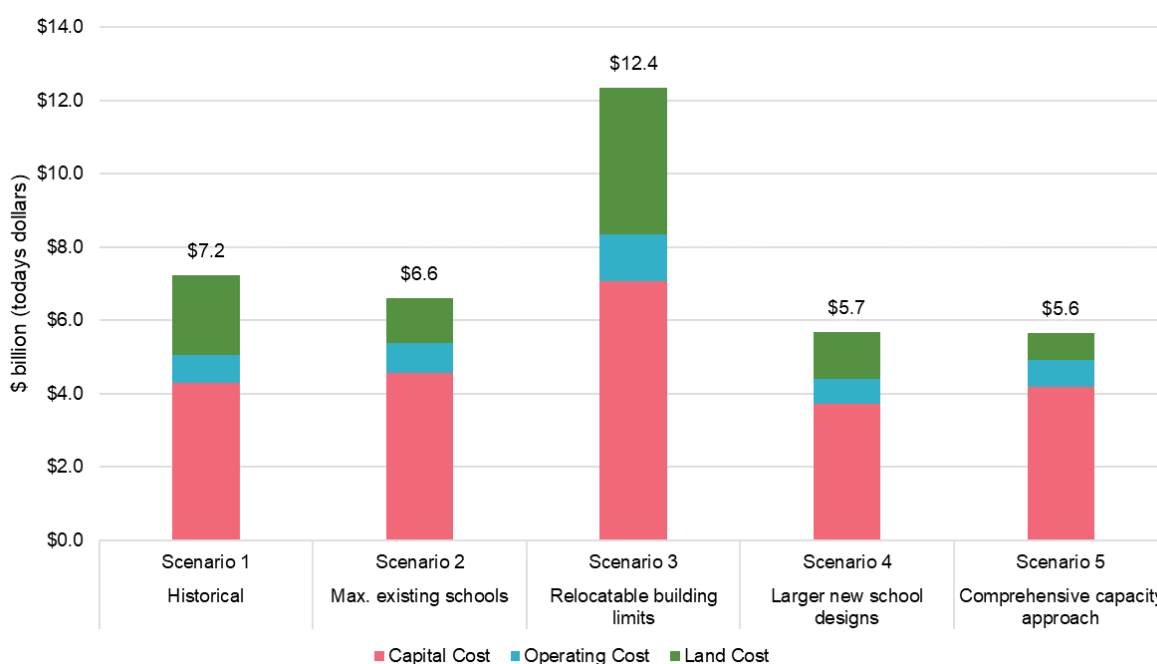
In the 'comprehensive capacity approach' scenario, the government would use both more relocatable classrooms and larger new schools (scenario 5). This scenario would reduce costs to \$5.6 billion, slightly lower than the previous scenario. The reduction is only small because while fewer new schools are needed in scenario 5, adding more relocatable classrooms and expand some existing schools still carries significant costs.

If schools cannot use as many relocatable classrooms, as modelled in the 'relocatable building limits' scenario, many more new schools will be needed. This would mean building over 100 new schools by 2036, compared to 60 in the 'historical' scenario (scenario 3 in Figure 6). More new schools will still be needed in the established areas of Melbourne as these areas already rely on relocatable classrooms and have limited space to expand. The 'relocatable building limits' scenario was the most expensive we modelled, estimated to cost \$12.4 billion by 2036. We modelled this hypothetical scenario to test our assumptions on relocatable classroom capacity, to understand how many new schools might be needed if fewer relocatable classrooms were used.

We think the government should pursue the 'maximising existing schools' and 'larger new school designs' scenarios because they minimise infrastructure costs and make better use of existing school assets (scenarios 2 and 4). The government will need to consider which locations are most suited to use either approach, as not all schools in every subregion can be expanded. Combining these two approaches in the 'comprehensive capacity approach' scenario slightly reduces the total cost but may result in children travelling further to get to school as fewer new schools are built in this scenario.

This scenario might also mean new schools are designed differently than traditional school layouts, with a different range of facilities. For example, they might have many more storeys, have rooftop outdoor areas, or have more indoor facilities, like sports courts, rather a more traditional layout with large grounds. Some consideration might have to be given between the balance between open space, including for sharing with the community, and the intensity of school buildings and amenities.

Figure 9: Estimated costs for expanded and new schools needed by 2036



Source: The Centre for International Economics, *Part 1: Primary and secondary schools provision projection, 2024*

Identify and fund schools to expand

Recommendation 3

Identify schools to expand and confirm areas that will need new schools. By 2030, fund expansions of existing schools and begin delivery of 35 to 60 new schools. Minimise costs by expanding the built capacity of existing schools and building larger new schools.

Schools can expand in different ways depending on the land available. Expanding existing schools is typically cheaper than building new schools, and some government schools have space to grow. Our model estimates that existing schools, if expanded, could accommodate almost half of Victoria's expected enrolment growth by 2036.¹¹²

The government should plan to accommodate new students in existing schools wherever possible, before building new ones. We estimate that adding extra buildings at existing schools would cost between \$1.5 billion and \$3.3 billion, depending on how many relocatable classrooms are needed (scenario 1 and 2 in Table 4).¹¹³ This would avoid government spending up to \$2.4 billion in construction and land costs for new schools by 2036.¹¹⁴

Our modelling shows that existing schools in all regional and remote areas of Victoria have enough space to accommodate future school-aged population growth if they are expanded. These schools can expand their existing sites through relocatable or new permanent buildings.¹¹⁵

Modern relocatable classrooms are high quality classrooms that are designed to provide teachers and students with quality learning environments. We have found no evidence that relocatable classrooms directly affect school learning outcomes.¹¹⁶ However, older portable classrooms were often one-size-fits-all and poorly designed. They produced substandard learning conditions, often did not have heating or cooling, and were not designed as learning environments.¹¹⁷ Modern relocatable classrooms are prefabricated with both their purpose and environment in mind. Prefabricated classrooms provide more flexibility and quality, because they are designed as permanent structures.¹¹⁸

Increasing the built capacity of existing schools might reduce the amount of open space that is available to students. Our *Getting more from school grounds* report found that school sports fields, courts and playgrounds are important community infrastructure.¹¹⁹ The government should consider the available recreational facilities for the community nearby when it chooses which schools to expand, so communities can still access sufficient outdoor spaces.

Begin delivery of new schools by 2030

Even if the Victorian Government prioritises increasing the built capacity of existing schools where possible, our modelling shows some areas will still need new schools. We recommend that the Victorian Government plan, fund and buy land for 35 to 60 new schools by 2030.

Our analysis shows that the government might save \$1.5 billion by building larger new schools (scenario 4 in Table 4). This is because they do not need to build as many. The government should minimise infrastructure costs and make better use of its existing assets by expanding the built capacity of existing schools and building larger new schools.

Many factors go into delivering a high quality education, including experienced teachers, student and parent engagement, a strong curriculum and quality educational infrastructure.¹²⁰ Evidence shows that schools with larger student numbers are able to offer a wider range of subjects compared to smaller schools.¹²¹ One consideration when building larger schools is ensuring that students do not have to travel too far to get to school. This can impact how students get to school, whether by car, bus, walking or cycling.

Land is about a third of the total cost for new schools on average, and up to half in inner Melbourne. We estimate the total cost for expanded and new schools needed by 2036 is between \$5.7 and \$7.2 billion (including land costs), depending on the size of new schools (scenario 4 and scenario 1 in Table 4).¹²² This cost may be reduced in the future through adopting new technologies.

Table 4: Breakdown of estimated costs for expanded and new schools needed by 2036 (\$ billion)

	Historical	Maximise existing schools	Relocatable building limits	Larger new school designs	Comprehensive capacity approach
	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5
Relocatable classrooms and new permanent buildings	\$1.5	\$3.3	\$2.0	\$1.5	\$3.3
New schools	\$3.5	\$2.1	\$6.4	\$2.9	\$1.6
Land	\$2.2	\$1.2	\$4.0	\$1.3	\$0.7
Total cost	\$7.2	\$6.6	\$12.4	\$5.7	\$5.6
Difference to historical scenario		-\$0.6	+\$5.2	-\$1.5	-\$1.6

Source: The Centre for International Economics, *Part 1: Primary and secondary schools provision projection*, 2024. Note costs are in today's dollars.

Our *Digital technology and infrastructure productivity* report found that governments can use technology to reduce construction costs. For example, it can use advanced data analytics in construction, such as building information modelling, building management systems and digital twins. Using these technologies can increase productivity and reduce unbudgeted disruptions.¹²³ The research showed digital technologies can unlock economic benefits worth millions of dollars. Construction of kindergartens, schools and TAFEs can use machine learning and artificial intelligence technologies. When applied to the government education capital projects portfolio, this technology could deliver over half a billion dollars' worth of economic benefits by 2055 by avoiding cost overruns and reducing project risks.¹²⁴

There are also opportunities for the government to consider using standardised designs for new schools to reduce design and building costs. The Victorian School Building Authority currently uses permanent modular school buildings to expand existing schools faster and with a reduced environmental impact.¹²⁵ Expanding this approach to new schools could create further benefits.

New schools can also be designed to make better use of land and be flexible for future expansions. This can also include designing new schools for shared use with the community.¹²⁶

This approach especially helps in growth areas. In these places, the Victorian Government assumes 60% to 70% of students will enrol in government schools. It assumes that other students attend Catholic and independent schools. If the government plans a pipeline of future schools now, it can purchase and set aside land for future schools. This can save on land purchase costs, especially if land prices keep rising rapidly. The government can also aim to schedule the construction of new schools so they are available to open when the area has enough potential students. If the government regularly published its estimates of potential future demand for new schools, this would give the non-government schools sector valuable information to plan their schools' timing and location more confidently too.

The Victorian Government closely watches the pattern of school enrolments. It uses this information to regularly review its school demand forecasts. These can differ from official projections, and even the government's past estimates. Actual demand for individual schools depends on multiple factors, some of which can change rapidly. It can sometimes grow faster or slower than even detailed estimates. For

example, international or interstate migration or the fertility rate may have sustained changes, which can affect how many school-aged children live in Victoria in the longer term. In local school catchments, the population of school children can change even more rapidly. As the government observes these changing patterns, it can adapt its pipeline of schools to help avoid schools becoming crowded.

The government uses different funding sources for education infrastructure. It funds school construction projects from general Victorian Government revenue in its budget. It also allocates funds from the Growth Area Infrastructure Contribution Scheme to land acquisition, construction and infrastructure upgrades for schools in Melbourne's growth areas. These contributions have already provided over \$250 million in funding for schools in Melbourne's 5 growth area councils.¹²⁷

We have previously proposed an option for the Victorian Government to design a new, simpler system for infrastructure contributions. This new scheme could collect infrastructure contributions from the construction of new homes in all urban areas.¹²⁸

The Victorian Government has recently announced that it will begin long-term statewide reforms of existing infrastructure contribution programs. This will begin by trialling infrastructure contributions in 10 activity centres in established suburbs from January 2027.¹²⁹ A reformed infrastructure contributions scheme could cover established areas in Melbourne and regional cities, new growth areas and intensive development precincts. The Victorian and local governments could use the contributions for infrastructure projects, including new schools, or expanding schools on existing sites.

Port Melbourne Secondary College

Port Melbourne Secondary College is a new, multi-level, vertical school in inner Melbourne. It opened in 2022 and has enough space for 1,100 students.¹³⁰ It is next to several large public sports fields in JL Murphy Reserve. Students can also use these sports fields.

Only buses provide public transport to the school. But the proposed route for a future tram line through Fishermans Bend is nearby.¹³¹

The school will progressively accept students at higher educational levels. It offered years 7 to 9 in 2024 and will add year 10 in 2025. It is an example of building a secondary school on a small site in a densely populated area and making better use of nearby public open space.

The 2022 Victorian Premier's Design Awards listed the college's design as a finalist.¹³²

Image below: Port Melbourne Secondary College – new school (Source: Victorian School Building Authority)



Consider alternatives to new schools in established areas

Our research report, *Choosing Victoria's future*, showed that more compact cities provide better social, economic and environmental outcomes for Victorians. We also found that infrastructure costs are lower in more compact cities. We estimated a compact city would save the government around \$59,000 for each new home built, compared to a more dispersed city.¹³³ Achieving more growth in Melbourne's established areas will produce more compact cities and generate these positive outcomes and overall cost savings. But that research also showed that not every infrastructure type costs less in compact cities. We estimated that education infrastructure can cost 20% more in a compact city compared to a dispersed city, but this is offset by cost reductions for other infrastructure types.¹³⁴

Schools are more expensive to deliver in established areas than in new suburbs, especially in inner Melbourne. This is because the projects are often more complicated to build in already developed areas.¹³⁵ They are on often smaller sites, meaning the schools might need to be several storeys high. The projects have to manage more impacts on neighbouring properties and in surrounding streets. They are also more expensive because suitable land can be difficult to buy in these places, and land prices are much higher. The government may have fewer options to expand existing inner Melbourne schools because many do not have room for relocatable classrooms. They also may not have been designed to allow expansion, such as by adding extra storeys.

The Department of Education undertakes planning to identify school infrastructure for different areas, estimates project costings, and plans a sequence of investment. The department provides information to the Victorian Planning Authority to plan for new school sites in areas that have precinct structure plans. These are typically only in new growth areas, or urban redevelopment areas like Arden and Fishermans Bend. In growth areas, these plans also help secure funding from Growth Area Infrastructure Contributions levied from developers.¹³⁶ But if a new school is required in established suburbs, outside these planned redevelopment areas, finding suitable sites can be difficult and expensive.

The government can also consider alternative delivery models for new schools in the established areas of Melbourne to meet future school-aged population growth and work with the limitations for building new schools in these areas. This will be needed to meet increased demand for school places in established areas.¹³⁷

The Department of Education is already considering many approaches to delivering schools. We found some specific approaches to delivering schools in established areas during our research. These include:

- using larger, multi-storey relocatable buildings on constrained sites for existing schools
- arranging for shared use of public outdoor spaces and sports fields with councils for schools in established areas which do not have space for their own sports fields
- repurposing existing buildings for schools, such as commercial buildings, or exploring shared use with other community facilities
- planning schools as part of urban renewal sites in precincts or building schools in mixed use developments
- planning and building new schools in stages and leaving room for expansion, including by designing in possible future extra storeys
- allocating different year levels across multiple nearby campuses where existing school sites are constrained, as the next case study shows
- increasing the flexibility of school hours to manage demand.

Schools can also become community hubs that provide other services to the community. This allows for shared use of school facilities to make better use of these where there may be land constraints to developing separate facilities, particularly in inner Melbourne. This could include shared community use of sports halls, playgrounds, meeting rooms, libraries and classrooms.¹³⁸

Inner city schools with multiple campuses

When limited land is available for expansion on a school site, there may be an opportunity create a nearby second campus that remains part of the same school.

Wurun Senior Campus, Fitzroy High School and Collingwood College

Fitzroy High School operates one campus for students in years 7 to 10 and another campus, Wurun Senior Campus, for students in years 11 and 12. Wurun Senior Campus is operated in coordination with Collingwood College. It was completed in 2022 as part of the transformation of the Fitzroy Gasworks.¹³⁹ Designed specifically for students in their final years of high school, it was purposely built to offer a campus designed to imitate a tertiary education campus to prepare students for post-school education.¹⁴⁰ It is now operated in partnership by both schools for their year 11 and 12 students.¹⁴¹ Wurun Senior Campus was a finalist in the 2023 Victorian Premier's Design Awards for architectural design.¹⁴²

Kinnear Campus, Footscray High School

Footscray High School has three campuses, two for students in years 7 to 9 and the Kinnear Campus for students in years 10 to 12. Footscray High School received \$25 million from the Victorian Government in 2020-21 to modernise the Kinnear Campus, which was completed in early 2024. Government funding allowed the school to redevelop staff facilities, expand the canteen, revitalise the library, reconfigure classrooms to provide more flexible learning spaces and upgrade other amenities.¹⁴³

Image below: Wurun Senior Campus (Source: Victorian School Building Authority)



Expand TAFE in Melbourne's growth areas and large regional centres

The Victorian Government has been involved in technical education for over a century.¹⁴⁴ Technical and Further Education institutes, or TAFEs, were formalised as a public sector in 1974 to improve access to education for adults outside of universities.¹⁴⁵

Today, TAFEs offer technical training that allow Victorians to gain new skills and further their careers. Victoria has 85 TAFE campuses in total, 48 in Melbourne and 37 across the rest of Victoria.¹⁴⁶

VET and TAFE defined

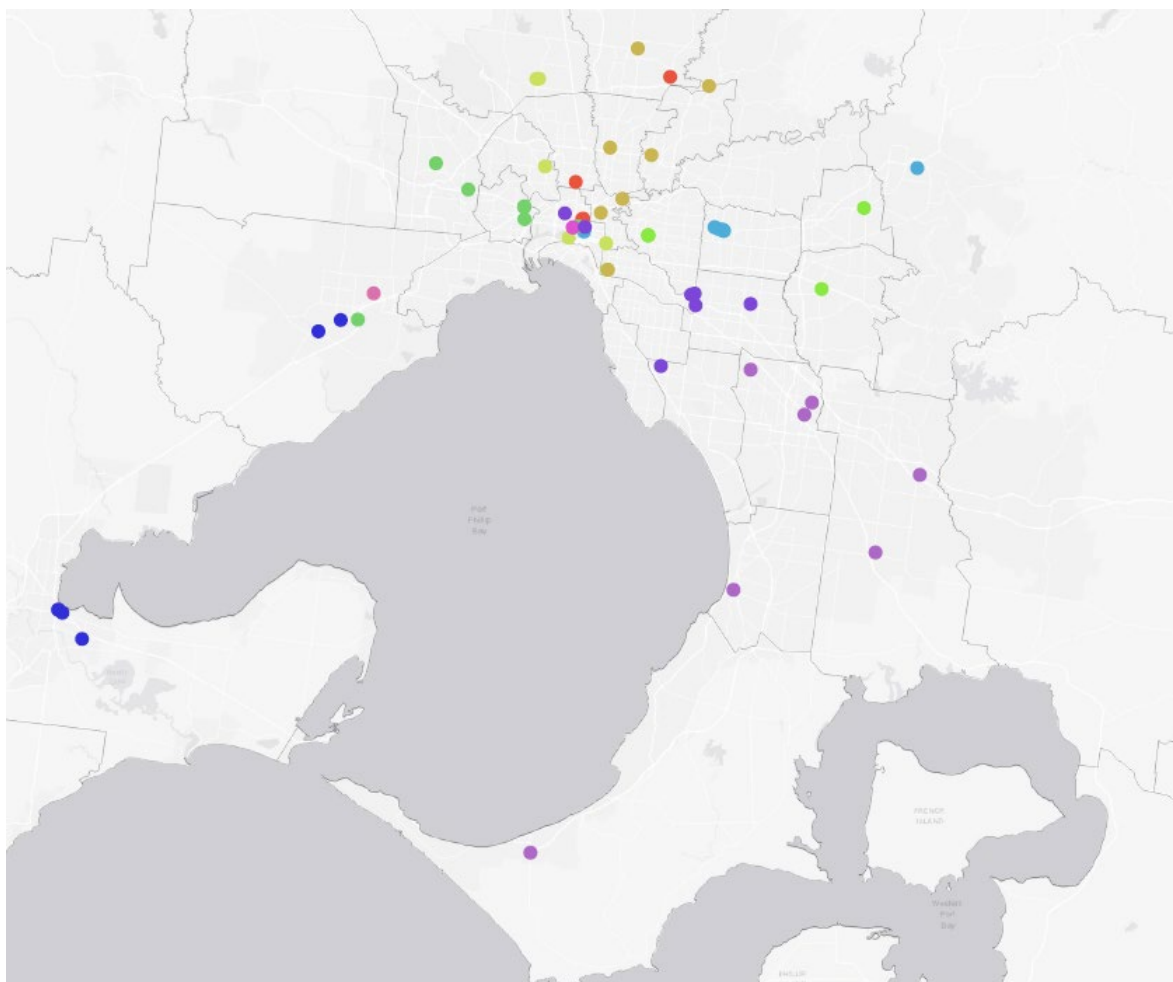
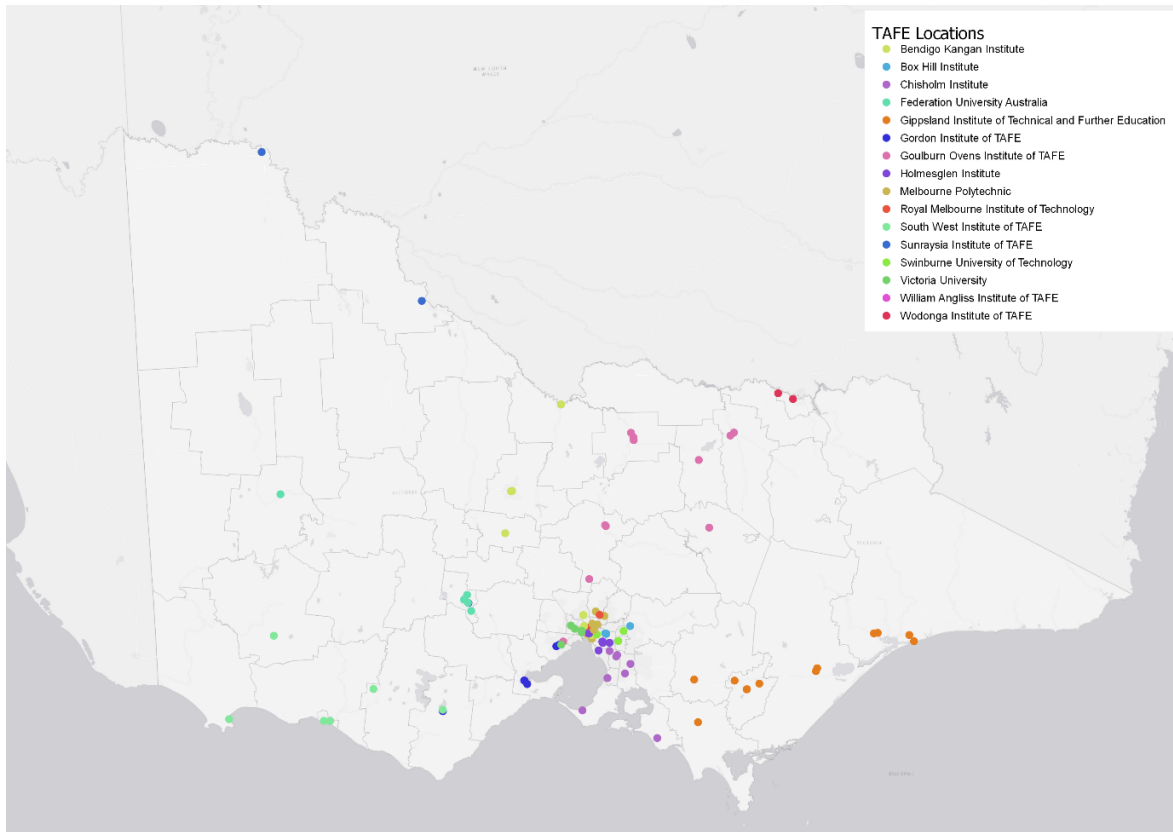
Vocational Education and Training (VET) provides students with practical skills and knowledge that prepare them for work, including for specialist skilled jobs. TAFE is the public provider of VET.

Many different organisations provide vocational education, these include:

- technical and further education (TAFE) or similar public institutes
- private providers
- enterprise registered training organisations that deliver training to their staff
- some schools and universities
- some professional or industry associations
- not-for-profit community-based adult education providers.¹⁴⁷

Victoria has 12 independently governed stand-alone TAFE institutes. It also has 4 universities that provide TAFE, or dual-sector TAFE providers. These institutes provide training services on 85 main campuses, along with several other small, specialised and on-site training locations.¹⁴⁸ The TAFE network has over 700 buildings on over 100 campuses and are valued at approximately \$3.5 billion.¹⁴⁹

Figure 10: Map of TAFEs in Victoria



TAFEs benefit people from disadvantaged groups

TAFE especially benefits people who do not have a high school qualification to gain further training for a career. Fourteen percent of Victorians who started high school in 2018 were not enrolled in year 12 in 2023. Some of these students moved away from Victoria, while others dropped out of school entirely.¹⁵⁰ While 100% of students completed year 10 in 2023, only 86% completed year 12.¹⁵¹ But for students who were eligible to complete the Victorian Certificate of Education (VCE), 97.5% satisfactorily completed year 12 in 2023.¹⁵²

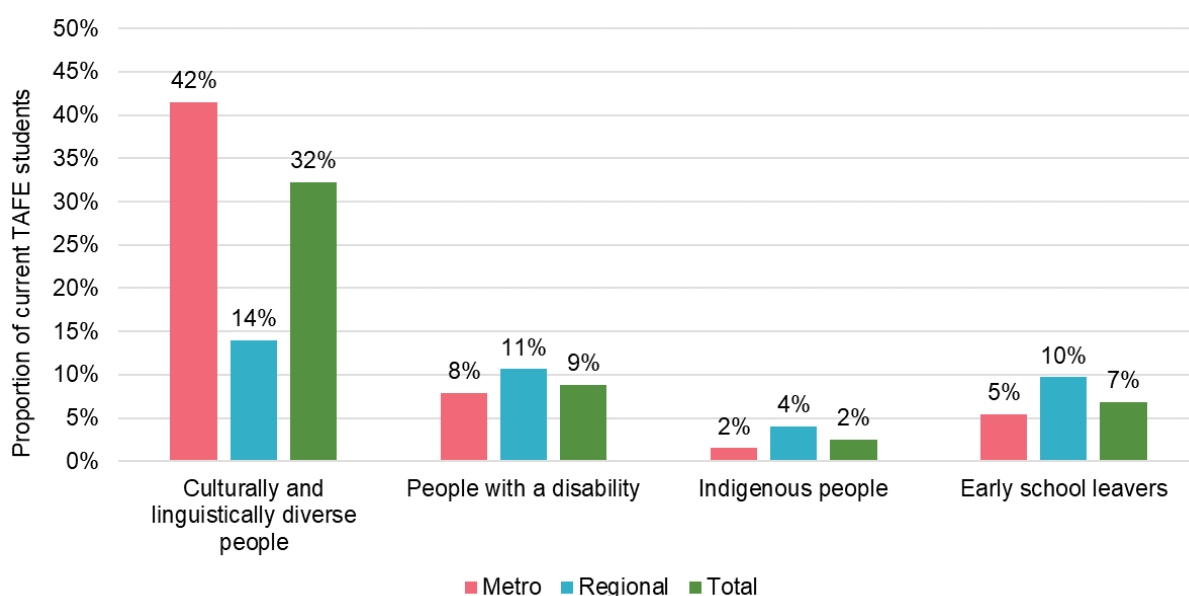
People who do not finish school have fewer job choices and opportunities.¹⁵³ Better TAFE access can provide them with another opportunity for further education to develop more skills so they can get a good job.¹⁵⁴ Completing a TAFE course can produce better life outcomes for people who do not have other qualifications.

Completing a TAFE qualification can increase employability and lower unemployment. It can improve employment prospects, provide opportunities to enter a diverse range of careers and offer a pathway to further education.¹⁵⁵ In 2023, 68% of all VET graduates gained employment or a better job after completing their studies.¹⁵⁶ The Australia Institute found that participation in employment is 15% higher amongst VET graduates than people without post-high school qualifications.¹⁵⁷

This increase in workforce participation improves the livelihoods of people in vulnerable groups, as TAFE is often more suitable and accessible than university for some people from socially and economically disadvantaged groups.¹⁵⁸ In Australia, 40% of students enrolled in TAFEs come from a low socio-economic background, compared to 33% in private registered training organisations and 14% in universities.¹⁵⁹ Students from low socio-economic backgrounds are more likely to complete their TAFE qualifications than average.¹⁶⁰

Our survey found that people aged between 25 to 54, living in growth areas, born outside Australia or people who speak a language other than English were more likely to enrol in TAFE.¹⁶¹ In June 2023, 32% of Victorian TAFE students were people from culturally and linguistically diverse backgrounds (see Figure 11). At that time, 9% of TAFE students were people with a disability, 2% were Indigenous Australians and 7% were early school leavers.¹⁶² In regional Victoria, a higher proportion of students had a disability, were Indigenous people, or were early school leavers, compared to metropolitan Melbourne.¹⁶³

Figure 11: Demographic characteristics of current TAFE students



Source: DJSIR data provided for TAFE student demographics, June 2023

TAFE graduates can fill Victoria's skills gaps

Australia has skilled labour shortages.¹⁶⁴ The nation's shortage of skilled tradespeople is forecast to peak at 131,000 workers.¹⁶⁵ The healthcare sector also has skilled worker shortages, particularly of aged and disability carers.¹⁶⁶ Many of the sectors that have labour shortages rely on TAFEs to train new workers and upskill existing ones.¹⁶⁷

TAFE graduates can help fill worker shortages for construction and healthcare jobs. Jobs and Skills Australia have identified significant worker shortages in these two sectors, both in Victoria and nationally. The construction industry does not have enough qualified workers in part because it struggles to attract women and younger workers.¹⁶⁸ Jobs and Skills Australia have said that this shortage is making the housing crisis worse because it creates a backlog of infrastructure projects.¹⁶⁹

The healthcare sector has grown rapidly over the last decade, and *Victoria's skills plan* estimates 83,300 new workers will join the healthcare and social assistance sector by 2026.¹⁷⁰ But Australia's ageing population will keep increasing the demand for healthcare workers. This rising demand has contributed to a large workforce turnover.¹⁷¹

Victoria needs more skilled workers for the energy transition

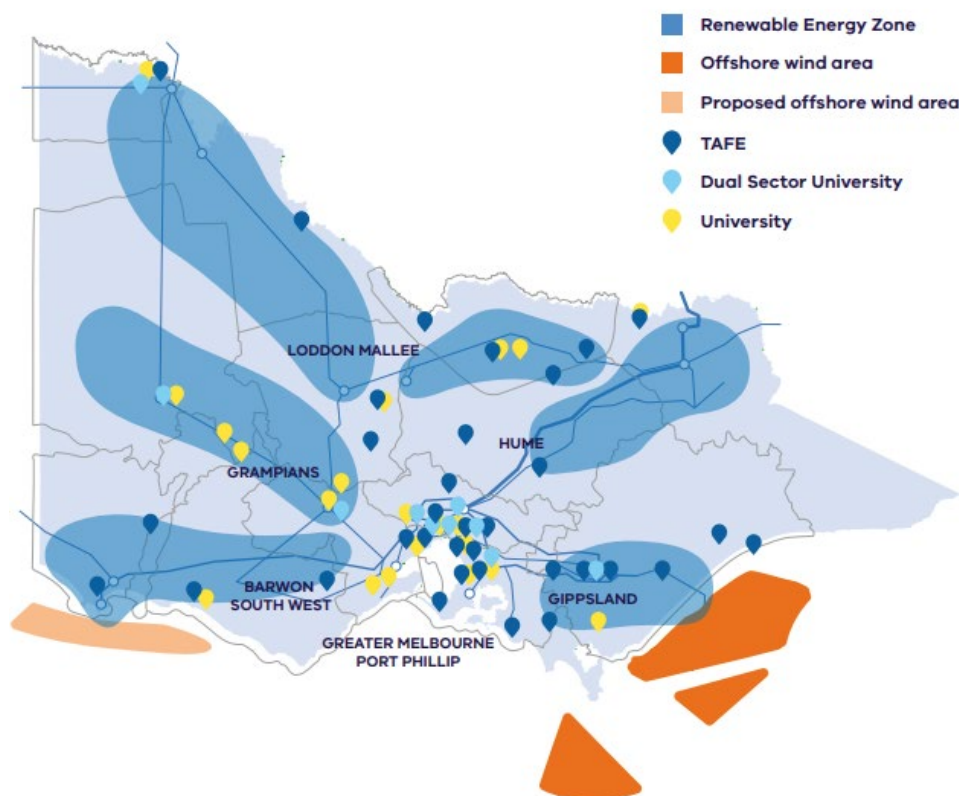
Victoria's transition to renewable energy sources is large and must happen quickly. It will require many more workers in energy-related trades and skills. Jobs and Skills Australia estimates Australia will need 10% more electricians in the next 5 years as more homes disconnect from gas and install more electric vehicle chargers.¹⁷²

The energy transition will create new specialist occupations. Jobs and Skills Australia have identified several new occupations that will emerge from the bioenergy, transport, energy performance, manufacturing and processing, and land use sectors.¹⁷³ These new occupations will require new training courses. The renewable energy sector currently relies on skills and qualifications that have not been specifically designed for renewable energy technology, systems, and infrastructure. Stakeholders say that this can require workers to retrain on the job, or outside of work. Finding and accessing the right training can be difficult.¹⁷⁴

For example, constructing offshore wind farms will require many more trained workers, including in new skills not traditionally taught. The Victorian Government has legislated a target of producing 9 gigawatts of electricity from offshore wind farms by 2040.¹⁷⁵ These projects will need 2,300 to 4,000 development and construction workers between now and 2035. That includes electricians, engineering professionals, machinery operators, and construction managers.¹⁷⁶ After 2035, Victoria will require a long-term workforce of 1,500 to 1,750 workers to operate the offshore wind farms, including wind turbine technicians and marine transport professionals.¹⁷⁷

TAFE institutes will be one of the major education providers to train workers with the skills for the energy transition. Federation University, a dual sector university in Victoria's TAFE network, is currently developing the Asia Pacific Renewable Energy Training Centre. Backed by major global renewable energy companies, the centre will deliver training specific to the wind energy sector, including a blade technician apprenticeship.¹⁷⁸ Stage 1 saw the construction of a 23-metre wind turbine training tower. Stage 2 will install better facilities and training equipment. The TAFE Clean Energy Fund allocated \$6 million to develop the second stage.¹⁷⁹

Figure 12: Renewable energy zones and tertiary education campuses in Victoria



Source: Department of Energy, Environment and Climate Action, [‘Victorian Energy Jobs Plan consultation paper: supporting the development of the Victorian Energy Jobs Plan’ 2024](#), p 24.

TAFEs will need more space to train students

The *Victorian skills plan* estimates Victoria will have 352,000 new workers by 2026.¹⁸⁰ Almost half of them will require vocational qualifications.¹⁸¹ The government expanded the Free TAFE program in 2024, which led to more enrolments.¹⁸² Of the 4,000 adults we surveyed, 22% said they would likely enrol in TAFE in the next 5 years.¹⁸³

TAFEs will need more space to train these extra skilled workers. We also expect that existing workers will need to upskill to learn about new technological changes that affect their work. We expect this will also mean more demand for TAFE courses.

Construction, trades and healthcare training need purpose-built spaces to accommodate its specialist nature. Students must use specialist equipment to learn practical skills in work-like settings. Instructors must often teach these courses in person, rather than online, meaning they need more learning spaces to teach extra students.

In 2023, the Victorian Government committed to build a new \$55 million construction-focused TAFE campus in Melton by 2028. Bendigo Kangan Institute will construct and operate the new campus.¹⁸⁴ The government has also committed to a new TAFE campus in Sunbury as part of the Building Better TAFE fund.

Future floorspace requirements for TAFEs

We estimate that Victoria’s TAFEs will need about 20% more space to accommodate expected enrolments in all sectors by 2036. This on top of the new TAFE campuses the government has already committed to. To calculate the extra floorspace that TAFEs need to meet the workforce demand from Victoria’s projected population in 2036, we used the following data sources:

- *Victoria in future* 2023 population projections for people aged 15 to 64 years
- current TAFE enrolments by sector
- current floorspace at each TAFE campus by sector
- benchmark ratios of floorspace per enrolments by sector.¹⁸⁵

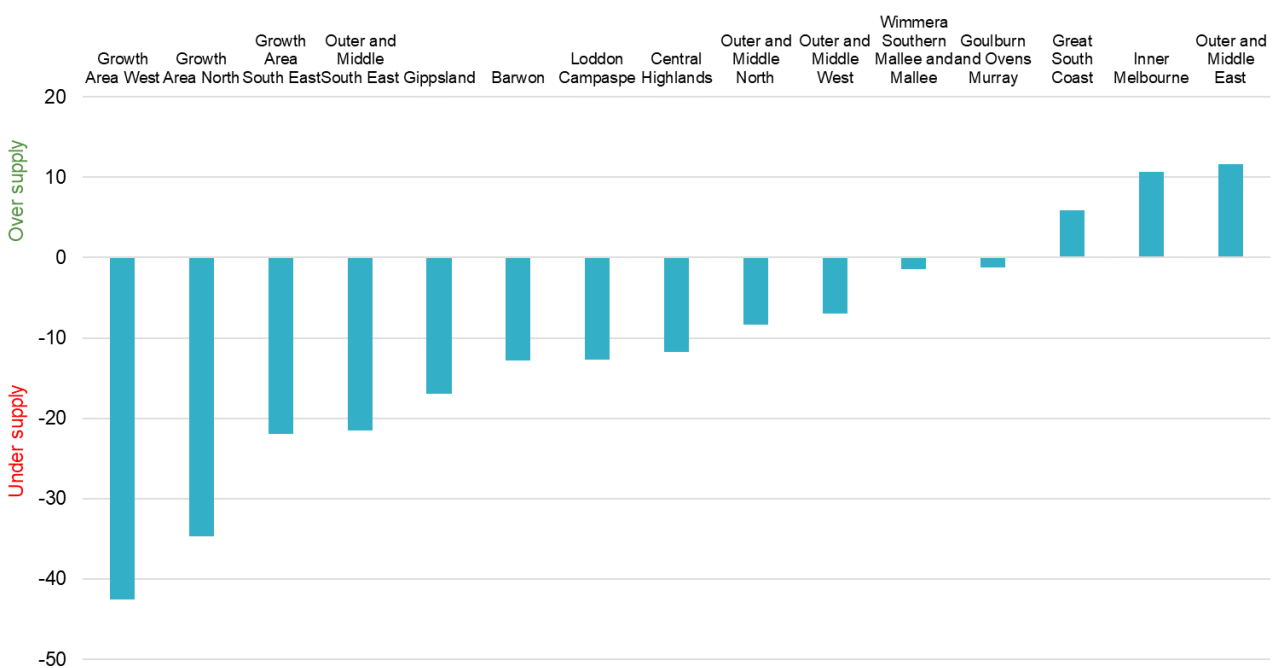
We estimated future TAFE enrolments in 2036 for different places in Victoria. We used the Australian Bureau of Statistics' statistical area level 3 (SA3) for the calculations. These areas usually cover a town or several suburbs and contain between 30,000 and 130,000 people. We compared the current TAFE enrolment data to Victoria in Future population projections. We then estimated the amount of floorspace needed for extra future enrolments using benchmark floorspace ratios. Finally, we compared the future demand for floorspace with the current supply at existing TAFE campuses by broad region. This allowed us to project the difference between the current supply of floorspace, and the amount that region is likely to need in 2036.

These projections show that TAFEs in Melbourne's west, north and south-eastern growth areas will need more space, especially to train students in skills for the construction and healthcare sectors. TAFEs in some parts of regional Victoria will also need more space to meet likely future demand, particularly in Ballarat, Geelong, Bendigo and the Latrobe Valley. For Figure 13 we grouped the SA3s into larger regions to present the data.

We estimate that TAFEs in Melbourne's growth areas will need over 125,000 square metres of extra floorspace to deliver training in construction and healthcare combined. TAFEs in Geelong, Ballarat, Bendigo and the Latrobe Valley will also need around 50,000 square metres of extra floorspace to meet the future demand from those sectors.

Planning and constructing TAFE infrastructure is complex. In part, this is because different TAFE institutes and campuses specialise in certain courses that attract students from further away. For some specialist courses this is the best option, as they would not have enough students to be taught in many locations. This means a region might have more demand for TAFE courses than its local population suggests, such as in inner Melbourne.

Figure 13: Estimated gap between projected demand in 2036 and current supply of TAFE floorspace for health and construction sectors by region



Source: Infrastructure Victoria analysis of Department of Transport and Planning, '*Victoria in future 2023*' [data set], DTP website, 2023; Department of Jobs, Skills, Industry and Regions, 'TAFE enrolment' [data set], provided to Infrastructure Victoria, 2024.

People experience barriers to accessing TAFEs

We commissioned 2 studies to identify current barriers for people accessing TAFEs today. One study examined how far people have to travel to reach a TAFE campus. For example, it measured how many people can reach a TAFE campus within 30- or 60-minute trips, by car or by public transport. The second study surveyed 4,000 households. We asked people questions about how they use and access social infrastructure, like TAFE institutes.

The people we surveyed said their 3 largest barriers to accessing TAFEs were:

- the time and money needed to study at TAFE
- long transport times to reach the nearest TAFE campus
- TAFEs nearby did not offer suitable courses.

Time and money needed to study at TAFE

Our survey found the most common barriers to future TAFE enrollment or attendance were people's difficulty balancing study with other commitments, such as work or childcare, and the cost of TAFE courses. The people most likely to identify these as barriers are women, people aged between 25 and 54, and people with a household income between \$104,000 and \$260,000.¹⁸⁶

People living in Melbourne's middle and outer western suburbs were more likely to report having difficulties enrolling or accessing TAFE. Nearly three-quarters (74%) of respondents in this region reported having difficulty accessing TAFE, compared to the state average of 63%. For example, they cited work or childcare commitments prevented them from enrolling.¹⁸⁷

Several factors can improve access to TAFE to create more equitable access for Victorians. This includes improving transport connections to TAFE institutes or locating TAFE campuses in good locations close to public transport, jobs and services. This can mean people spend less of their scarce time travelling to campus, which might make study easier to fit in their schedule. Providing other services on campus, such as childcare, might help support parents and carers to study.

Co-locating kindergartens and TAFE campuses

Co-locating kindergartens on TAFE campuses can help people balance study with other commitments, including caring for children. For example, in Mildura, the TAFE Kids Child Care Centre is located right next to the SuniTAFE campus. The La Trobe University campus is also nearby. The centre offers both childcare and kindergarten places.¹⁸⁸ Many TAFE campuses have unused land they could make available for kindergartens and other services.

Long travel times

Some people reported that transport access to TAFE institutes prevented them from participating in TAFE programs. For people likely to attend TAFE, over 40% said they would only travel up to 30 minutes to attend TAFE.¹⁸⁹ Very few people were willing to travel more than an hour.¹⁹⁰

Almost everyone in Melbourne's inner, middle and outer suburbs can access a TAFE campus within 30 minutes by driving.¹⁹¹ In these places, transport access is not a large barrier for people who can drive to TAFE. But Melbourne's growth areas have worse access. Some people there cannot drive to a TAFE campus within 30 minutes. In Melbourne's western growth suburbs, 43,000 people (15%) cannot reach a TAFE campus within 30 minutes by car. In the northern growth suburbs, 21,000 people (11%) cannot reach

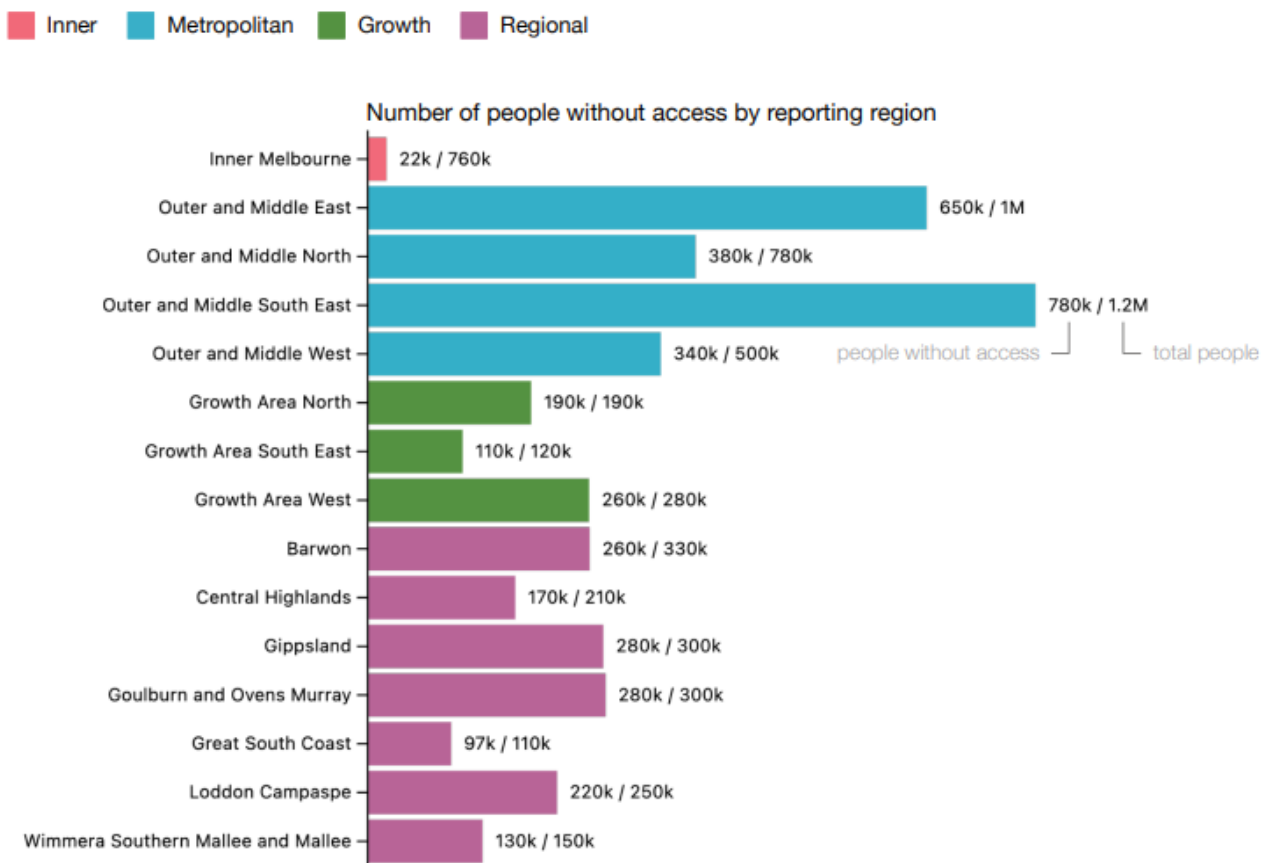
one, and 3,900 people (3%) living in Melbourne’s south-east growth suburbs cannot reach a campus in this time.¹⁹²

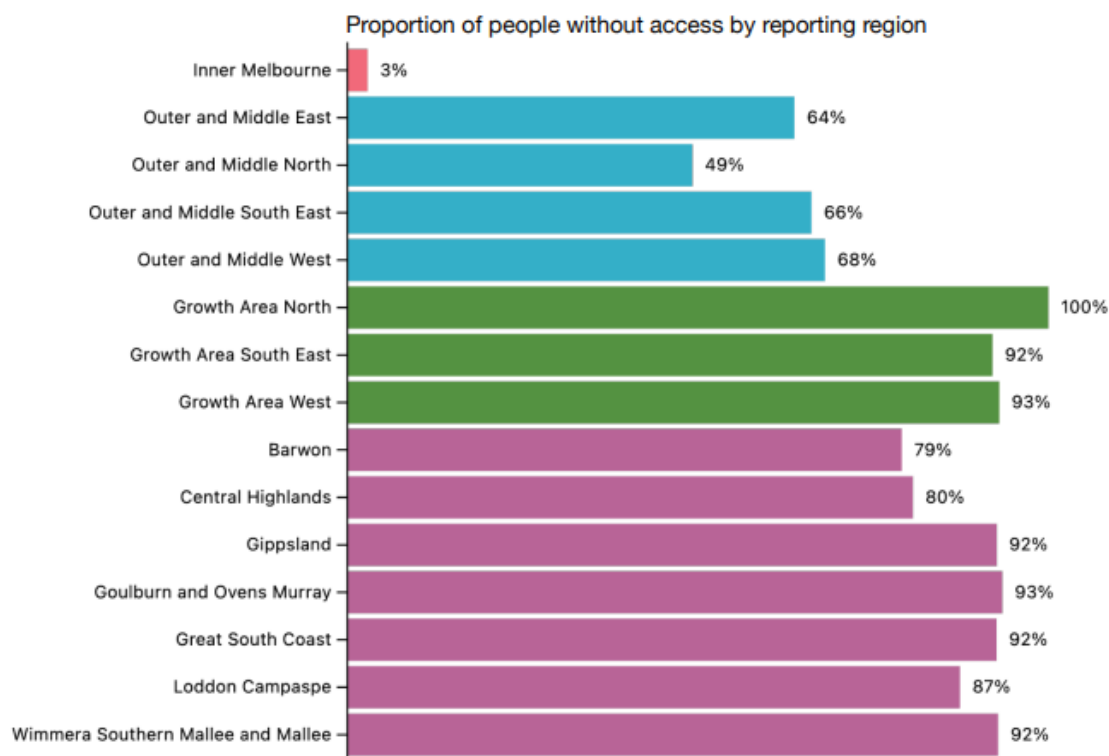
But not everyone can drive. And because TAFE often serves people who experience disadvantage, some TAFE students might be less likely to be able to drive than other Victorians. In Melbourne, just over half the population (56%) cannot reach a TAFE campus within half an hour by public transport. Nearly everyone in Melbourne’s inner suburbs can (97%). But again, people living in Melbourne’s new growth areas have the worst access to TAFE by public transport. Over 90% cannot reach a TAFE campus within half an hour by public transport.

Regional Victorians also have transport challenges in reaching TAFE. In Australia, regional and remote students often face distance and transport barriers to accessing tertiary education, and often have fewer course choices.¹⁹³ Regional Victorians also have worse access to TAFE than Melburnians. On average, 32% of the regional population cannot drive to a TAFE campus within 30 minutes. The Barwon region had the best access in regional Victoria, where only 12% of the local population could not access a TAFE campus within 30 minutes by driving.¹⁹⁴

Public transport access to TAFE in regional Victoria is also much lower than metropolitan Melbourne. On average, 87% of the population living in regional areas were unable to access a TAFE campus by public transport within 30 minutes. Figure 14 shows public transport access to TAFE in different regions of Melbourne and Victoria.¹⁹⁵ It shows that public transport access to TAFE is worse in Victoria’s regions and Melbourne’s growth areas.

Figure 14: People without public transport access to TAFEs during the morning peak within 30 minutes





Source: Arup, 'Social Infrastructure Accessibility Mapping – TAFEs', Infrastructure Victoria, 2024, p 5.

Suitable course offerings

People have good access if they live close to a TAFE campus. But the campus also needs to offer the right courses for students to enrol, to gain the benefit of extra skills and qualifications. TAFEs do not offer all courses at every campus. Some campuses offer specialised courses. Others have older buildings which prevent them offering certain courses.

Many people living in Melbourne's growth areas and regional Victoria cannot reach a TAFE campus that offers a suitable course within 30 minutes.¹⁹⁶ For example, TAFE campuses in Werribee and Berwick offer limited construction and trades training. In our survey, 62% of people said that they would be more likely to enrol in TAFE if the course they want to study is made available at a TAFE campus near them (of the 1,500 people we surveyed who were unlikely to enrol in TAFE in the next 5 years but did not reject future study).¹⁹⁷

People living in Melbourne's middle and outer western suburbs say their biggest barrier to access is 'the TAFE course I want to study is not available at a TAFE campus near me'. Of those surveyed, 22% of them said this was a barrier, compared to only 12% for the Victorian average. In Melbourne's growth areas, 18% of people said this was a barrier.¹⁹⁸

Registered Training Organisations and TAFEs

Registered Training Organisations (RTO) deliver nationally recognised training in the Victorian Education and Training (VET) sector. Some receive government funding to provide VET services. These providers compete with the TAFE system for students. In 2023, RTOs had over 280,000 enrolments, and TAFE had 237,000 enrolments.¹⁹⁹ RTOs typically offer more courses in healthcare and public administration, while TAFEs offer more courses in construction, hospitality and professional services.²⁰⁰

Our survey found that Victorians are more likely to consider going to a TAFE rather than a private RTO (58%). They believe that TAFEs have more industry opportunities than private RTOs (56%).²⁰¹

Victorians are 1.9 times as likely to associate TAFEs with producing job ready graduates than other RTOs.²⁰²

Those who were currently enrolled in TAFE strongly felt that it was important to study at a TAFE provider over other options. The main reasons they preferred TAFE were lower fees (42%), being offered by the government (38%), and being more reliable (37%). Other reasons included TAFE being more focused on practical skills (32%), TAFE offering better quality courses (31%) and TAFE being more focused on getting a job and therefore considered more favourably (30%).²⁰³

Sometimes RTOs fill the gap in places where TAFE does not offer courses. Many people living in Melbourne's growth areas attended RTOs, particularly in the west and northern corridors. RTOs are currently providing more government funded programs to people living in growth areas than TAFEs. This suggests these growth areas are underserved by TAFE, as more people are going to RTOs. If the government expands TAFE campuses in the growth areas, some demand may shift from RTOs to TAFEs.

Expand existing TAFE campuses to meet future demand

Recommendation 4

By 2030, expand TAFE campuses in Melbourne's west, north and south-east growth areas, and some large regional centres, to train more students to fill skills gaps, especially in construction, energy and health.

We recommend building more learning facilities at TAFE campuses in Melbourne's growth areas and in some regional centres, using their existing land where possible. This approach makes best use of existing Victorian Government assets and is less expensive than buying land to build a new campus. Many TAFE campuses have spare land, and are already near public transport, jobs and services.

The Victorian Government should work with TAFE institutes to confirm the best campuses to expand. It should choose places where TAFEs have space to grow. These should be close to public transport so people can get there easily, and near jobs and other services to attract more students.

We have identified several potential locations for extra TAFE facilities:

- Victoria University in partnership with Gordon TAFE – Werribee campuses
- Chisholm TAFE – Berwick campus
- Melbourne Polytechnic – new campus in the Craigieburn to Kalkallo corridor
- Gordon TAFE – Geelong campuses or a new campus in outer Geelong or the Surf Coast
- Federation University – Ballarat campuses
- Bendigo Kangan Institute – Bendigo campuses
- Gippsland TAFE – Latrobe Valley campuses.

The Victoria University campus in Werribee currently serves Melbourne's south-western growth areas, but its trades facilities are ageing. They are not fit for purpose and do not have enough space to meet future demand in the region. The Victoria University Werribee campus currently offers limited trades training.²⁰⁴ The Gordon TAFE also has two smaller campuses in Werribee that offer healthcare, early childhood education and animal studies courses. There is an opportunity for Victoria University and The Gordon TAFE to work in partnership to expand their campuses in Werribee to meet future demand.

Several Melbourne Polytechnic campuses serve Melbourne's northern growth areas. Their trades facilities on these campuses are also ageing and are too small to accommodate future demand growth.²⁰⁵

Melbourne's northern growth suburbs have some of the worst access to TAFE courses. In particular, the northern growth corridor from Craigieburn to Kalkallo has no TAFE campus. This area is a good option for a potential new TAFE campus.

The Chisholm Berwick campus in the south-east growth suburbs is near the region's growing new housing estates and has a train station close by. It has land available to expand and support demand for training in this region.

Many TAFE institutes hold substantial amounts of land.²⁰⁶ They might not need it all for future growth. In these circumstances, some TAFEs might reduce the size of some campuses or consolidate their assets on a smaller site. The government might use any proceeds from land divestment to help fund more infrastructure.

Upgrade regional TAFE campuses to become accessible

Regional Victoria has 9 TAFE institutes that provide training on 37 different campuses.²⁰⁷ Some of these TAFEs have upgraded or redeveloped several of these campuses. The campuses include the TAFE Gippsland's Port of Sale campus and the Bendigo Kangan Institute Bendigo city campus. Others are The Gordon culinary school in Geelong and the South West TAFE Warrnambool Library and Learning Centre.

But some older buildings at regional TAFE campuses are not fit for purpose to teach relevant courses in contemporary settings. They are not physically accessible for some staff and students with impairments and are sometimes off-putting for potential students. This ageing infrastructure also incurs higher maintenance costs and contributes to a lengthy backlog of maintenance requests.²⁰⁸

The long-running issue of people with disabilities being excluded from accessing VET education remains a problem on some regional campuses, due in part to the quality and location of TAFE's physical infrastructure.²⁰⁹ Some regional campus buildings do not meet with the Commonwealth *Disability (Access to Premises - Buildings) Standards 2010*.²¹⁰

Students living in regional and remote Australia face distance and transport barriers to accessing higher education. They also have limited choice in the types of education available to them.²¹¹ Our accessibility mapping showed that regional areas in Victoria have some of the lowest access to TAFE campuses by public transport, with many people unable to get to a TAFE campus within 30 minutes.²¹²

Reconfiguring campus locations and facilities in regional centres and increasing maintenance funding can improve access to training for students, including staff and students with a disability, and provide a better learning experience. TAFEs in regional Victoria can be expanded to offer courses that meet regional economic development needs. TAFE infrastructure should be designed to reflect the requirements for those courses. For example where construction training is needed specialised trades training facilities would be needed.

TAFE buildings need regular maintenance

The Department of Jobs, Skills, Industry and Regions has identified that Victoria's TAFE infrastructure has high asset maintenance costs. Many buildings are ageing and due for replacement. These buildings typically do not meet contemporary disability access requirements.²¹³ Recent evaluations have shown rectifying these issues may have significant costs, including to upgrade buildings to meet contemporary disability standards.²¹⁴

The Victorian Valuer General estimates the cost of replacing all TAFE facilities reaching the end of their useful life to be approximately \$3 billion.²¹⁵ TAFEs receive \$48.9 million for asset maintenance each year.²¹⁶ This figure has not increased in recent years.²¹⁷ The Victorian Auditor-General's Office reports that many

TAFE campuses are not spending enough on maintaining their buildings, as measured by their capital replacement ratio.²¹⁸

Ideally, good asset maintenance should keep pace with the size of the asset base and the costs of maintenance, including to ensure buildings are fit-for-purpose in the future. For example, replacing gas boilers with electric substitutes might cost \$95 million for boilers alone.²¹⁹

There might be an opportunity for some TAFE campuses to reduce in size, in circumstances where TAFE buildings are very old and have high costs to maintain or renew. The government might use any proceeds from land divestment to help fund new or upgraded infrastructure at other campuses.

Case study: Port of Sale campus upgrade, TAFE Gippsland

TAFE Gippsland opened a new campus at the Port of Sale in 2022. The Victorian Government funded the \$25 million capital development project. The new campus replaces TAFE Gippsland's ageing Fulham campus, which was 10 kilometres west of Sale.

The new campus consolidates the course offerings in 2 modern buildings, instead of in several older buildings. It is also in Sale's town centre, making it easier for people to access. The new buildings meet the *Disability (Access to Premises - Buildings) Standards 2010*.

The new campus allows TAFE Gippsland to offer more courses. For example, it has reintroduced vocational training to train much-needed health workers. The new buildings have specialised vocational learning spaces and workshops which simulate real world workplaces.

For example, the campus has an early childhood training facility that imitates a functioning day care centre. It also has workshops equipped with machinery for automotive, engineering and carpentry courses.



Image source: McCorkell Constructions and Architecture, Au

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