4. STATE INFRASTRUCTURE PLAN

4.1 Introduction

The 2017-18 State Infrastructure Plan (SIP) details major infrastructure projects that are funded for delivery in the period 2017-18 to 2021-22. It represents the Government's infrastructure priorities over the next five years. The 2017-18 SIP builds on the remarkable infrastructure investment that is driving growth in the NSW economy.

Box 4.1: Our infrastructure investment strategy designed for future prosperity

The SIP continues to build on the unprecedented pipeline of infrastructure with \$72.7 billion in budgeted investment over the next 4 years. The 2017-18 SIP includes:

- Sydney Metro Northwest with tunnelling complete and construction over 16 sites, the Northwest Metro is on schedule to commence services in 2019
- Sydney Metro City and Southwest planning approval for Sydenham to Bankstown is underway and Chatswood to Sydenham tunnel boring is set to commence in 2018
- WestConnex the largest transport infrastructure project in Australia addressing the needs of a growing city
- Western Harbour Tunnel and Beaches Link a preferred route has been announced and an extensive community engagement program is underway
- a multi-billion dollar hospital capital expenditure program includes \$632 million for Campbelltown Hospital Redevelopment, \$720 million for Randwick Hospital reconfiguration, \$534 million for a new Tweed Hospital, \$550 million for Nepean Hospital and \$341 million for Concord Hospital Upgrade.
- School Infrastructure NSW is the new specialist unit being established to oversee the delivery of an additional \$2.2 billion of new school infrastructure to commence in 2017-18 and 2018-19
- long-term solutions to the water needs of Broken Hill and surrounding districts, scheduled for completion by 2019.

The development of this SIP was informed by independent advice submitted to the Premier by Infrastructure NSW (INSW), pursuant to Section 19 of the *Infrastructure NSW Act 2011*.

4.2 Improving Governance and Assurance

The NSW Government maintains a strong set of policies that provide assurance to stakeholders and the public across all stages of the infrastructure lifecycle – from strategic planning, to project selection, funding and through to delivery. For example:

 At the strategic planning stage, the Greater Sydney Commission was established as an independent advisor to provide renewed vigour to urban planning, with a mandate to integrate infrastructure provision and strategic land use planning.

- The NSW Government continues to strengthen policies for the project selection stage, in particular with the March 2017 release of the revised NSW Government Guide to Cost-Benefit Analysis.
- The Infrastructure Investor Assurance Framework established in 2016, has improved Government oversight of infrastructure projects by implementing a tiered, risk-based approach to investor assurance for capital projects.

Further information on the Government's capital strategies and policies can be found at Appendix A of this Budget paper.

4.3 The role of the State Infrastructure Plan

The SIP is designed to highlight selected priority projects the Government will deliver. These projects are important both for the direct benefits they will deliver and for the further growth which they can unlock. The nominated projects are then managed to ensure they are delivered efficiently, on time and on budget, in a way that ensures the targeted outcomes are realised for the people of New South Wales.

In formulating the SIP, the Government aligns its investment decisions with its vision for the future of the State and its communities. The section below sets out the central priorities of the Government that have informed this SIP, and how the priority projects connect to a stronger, more prosperous future for New South Wales.

4.4 Priorities for New South Wales

The NSW Government is focused on implementing 12 Premier's priorities and 18 state priorities to grow the economy, deliver infrastructure, protect the vulnerable, and improve health, education and public services across NSW. Priorities relating to infrastructure include:

- building infrastructure key projects delivered on time and on budget across the state
- accelerating major project assessment halve the time for state significant development assessment
- · improving road travel reliability 90 per cent of peak travel on key road routes is on time
- · increasing housing supply deliver more than 50,000 approvals every year
- addressing housing affordability 90 per cent of approvals within 40 days and rezonings to support 10,000 extra dwellings a year in appropriate areas
- ensuring on-time running for public transport maintain or improve reliability of public transport
- reducing road fatalities by at least 30 per cent from 2011 levels by 2021
- increasing cultural participation at cultural venues and events in NSW by 15 per cent by 2019
- creating sustainable social housing increase the number of households successfully transitioning out of social housing by 5 per cent over three years
- · improving service levels in hospitals 81 per cent of patients through emergency within four hours.

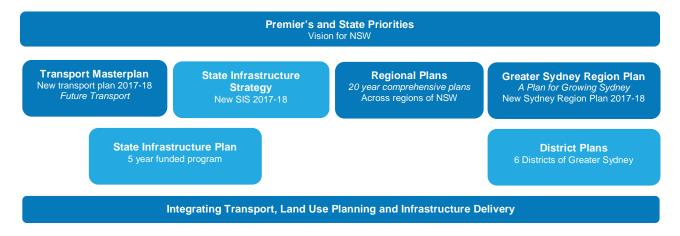
These priorities are reflected in our capital strategy, helping to make more consistent and better integrated investment decisions.

4.5 Integrating infrastructure and land use planning

In 2017-18 the Government will be publishing a new 20-year *State Infrastructure Strategy*, based on independent advice from Infrastructure NSW, the long-term transport masterplan *Future Transport* led by Transport for NSW and a refreshed *Greater Sydney Region Plan* based on independent advice from the Greater Sydney Commission.

These three important strategic plans are being developed concurrently to enable better integration of infrastructure, transport and land use planning. Beyond Greater Sydney, the Government is progressively publishing Regional Plans that have been developed by the Department of Planning and Environment with significant consultation across regions. The Regional Plans set out the long-term vision for each region.

Figure 1: The NSW Government's framework integrating infrastructure and land use planning



4.6 Passenger trains

The strategic direction for the rail network is set out in *Sydney's Rail Future* which is the long term plan to increase capacity in the rail network. It includes major new infrastructure delivered in parallel with better operation and customer service. Passenger rail projects include:

- Sydney Metro City and Southwest, a new 30 kilometre metro line linking Sydney Metro Northwest at Chatswood with the CBD, including stations at Barangaroo, Martin Place and Waterloo, and continuing southwest to Bankstown via Sydenham
- More Trains, More Services to support timetabling improvements and new fleet on the suburban network to provide more frequent services and additional express services
- New Intercity Fleet to deliver a new fleet of modern intercity trains
- Replacing the ageing XPT fleet and delivering a new maintenance facility in regional NSW.

Delivery of the following major projects supports the strategic direction for rail:

Table 4.1: Major projects and programs for passenger trains

Project Name	Estimated Total Cost (unless otherwise stated)	Description
Sydney Metro Northwest	\$8.3 billion	36 kilometre line from Chatswood to beyond Rouse Hill in North West Sydney as part of the new Sydney Metro Network.
Sydney Metro City and Southwest	\$1.7 billion (2017-18)	30 kilometre metro line linking Chatswood to Bankstown with a second harbour rail crossing as part of the new Sydney Metro Network.
More Trains, More Services	\$658.1 million (2017-18)	Enhancements to infrastructure and fleet to provide increased and improved rail services, with more express services to Western Sydney.
New Intercity Fleet	\$252.8 million (2017-18)	A new fleet of modern intercity trains, including about 512 brand new carriages, serving the Central Coast, Newcastle, the Blue Mountains and the Illawarra. The project includes a new maintenance facility.
Automatic Train Protection	\$268.6 million (2017-18)	Progressively fit the network and fleet with European Train Control System Level 1: a signaling, control and train protection system in the driver's cabin that interfaces with the trackside signaling system.
Transport Access Program	\$200.1 million (2017-18)	Improvements to provide a better experience for public transport customers by delivering accessible, modern, secure and integrated transport infrastructure where it is needed most.
Rail Power Supply Upgrades	\$114.2 million (2017-18)	Upgrades and new construction designed to meet expected power requirements for Sydney's future rail network and new air conditioned fleet, including 'More Trains, More Services'.
Rail Operational Centre	\$102.6 million (2017-18)	A consolidated rail operations centre at Alexandria to improve operations and incident management, for completion in 2017-18.
Central Walk	\$48.0 million (2017-18)	A new underground concourse at Central Station to better connect passengers to trains, buses, light rail and the new Sydney Metro.
Regional Rail Fleet Program (XPT replacement)	\$25.0 million (2017-18)	Planning the replacement of ageing diesel fleet to meet customer and service requirements for regional rail services.

Box 4.2: Western Sydney a focus for growth

The NSW Government is committed to realising the potential of Western Sydney. With the population of Western Sydney set to grow by 1 million people over the next 20 years¹, it is imperative that we invest in the infrastructure to enable that growth.

The NSW Government is working with the Commonwealth and local governments towards the first City Deal for NSW in Western Sydney. By harnessing tri-government coordination, the Western Sydney City Deal will focus on increasing infrastructure investment, employment, housing affordability, improved liveability and better environmental outcomes across the west and south-west of Sydney.

The NSW Government welcomes the Commonwealth Government's commitment to build Western Sydney Airport at Badgerys Creek, delivering a major infrastructure and jobs boost to the region. The NSW Government aims to maximise the opportunity and long-term success of the Western Sydney Airport by doing its part in investing hundreds of millions of dollars in projects around the precinct which is a catalyst for jobs and economic growth in Western Sydney. Work is progressing on the \$3.6 billion Western Sydney Infrastructure Plan to build new roads and upgrade local roads across seven local government areas.

In addition to roads directly associated with the Western Sydney Airport, a further \$153 million in 2017-18 is allocated for Western Sydney growth roads including Schofields Road, Narellan Road, The Horsley Drive, Mulgoa Road and Campbelltown Road upgrades to cater for growth.

Improving public transport is also a priority for Western Sydney to improve connectivity and decrease congestion. Options for Western Sydney's future rail needs are being investigated as well as planning for Parramatta Light Rail. Major timetable improvements, supported by upgraded rail infrastructure, will also be implemented on the existing network.

The 2017-18 SIP includes investment in the Campbelltown Hospital redevelopment and the Nepean Hospital and Integrated Ambulatory Services Redevelopment.

The new Western Sydney Stadium redevelopment at Parramatta is bringing Western Sydney a brand new rectangular stadium with all 30,000 seats under roof cover, plus an additional standing area with a 1,000-person capacity, creating approximately 1,200 jobs during construction.²

4.7 Urban roads

Urban roads support the majority of all passenger and freight journeys. Road infrastructure investment targets bottlenecks as well as servicing new areas. Strategic priorities for our urban road network include:

- improving the efficiency and safety of urban roads
- delivering the missing links on Sydney's motorway network
- identifying new road corridors and improving connections within Sydney's employment and residential growth areas.

The following major projects (Table 4.2) include those currently underway and those to commence over the five years of this SIP:

Department of Planning and Environment, 2016 NSW population and household projections.

Infrastructure New South Wales, Western Sydney Stadium.

Table 4.2: Major projects for urban roads

Project Name	Estimated Total Cost (unless otherwise stated)	Description
WestConnex	\$16.8 billion	Widening and extending the M4 and building the new M5 and joining them together to form a continuous free flowing motorway, with connections to northern and southern Sydney. The project is being delivered in three stages – Stage 1 from Parramatta to the City West Link, Stage 2 is the New M5 and Stage 3 a tunnel connecting the new M4 and M5 including the Rozelle Interchange.
NorthConnex (M1 to M2)	\$3.0 billion	A nine kilometre motorway tunnel linking the M1 and M2. This project is in part privately financed.
Easing Sydney's Congestion (Pinch Points & Clearways)	\$922.5 million	Measures to relieve traffic congestion and improve network efficiency at key traffic hotspots.
Northern Beaches Hospital, Road Connectivity and Network Enhancements	\$500.0 million	Road upgrades to support the new Northern Beaches Hospital at Frenchs Forest.
Western Sydney Growth Roads Program – Major Projects Bandon Road Link, Windsor Road to Richmond Road (planning) Memorial Avenue, Old Windsor Road to Windsor Road (preconstruction) Jane Street and Mulgoa Road Infrastructure Upgrade Narellan Road, Camden Valley Way to Blaxland Road Schofields Road (Stage 2), Tallawong Road to Veron Road Schofields Road (Stage 3), Veron Road to Richmond Road via South Street Riverstone Traffic Improvement Works Mulgoa Road Upgrade - Blaikie Road to M4 Motorway (Stage 1) Campbelltown Road upgrade (Stage 1) Appin Road improvements Badgally Road, Eagle Vale Drive to Blaxland Road	\$153.0 million (2017-18)	Major road upgrades and expansions to accommodate population and employment growth in Western Sydney, including the North West and South West Priority Growth Areas and Western Sydney Employment Area. The aim is to link the Greater Sydney workforce and business community with employment opportunities and markets, including through national and international gateways.
Western Harbour Tunnel and Beaches Link (planning and preconstruction)	\$103.0 million	A proposed tunnel to connect WestConnex at the Rozelle Interchange with the Warringah Freeway at North Sydney and a proposed tunnel connecting the Warringah Freeway with the Burnt Bridge Creek Deviation at Balgowlah.
F6 Extension (planning)	\$15.0 million (2017-18)	A proposed F6 Extension would provide the 35 kilometre missing link between Sydney's current motorway network, southern Sydney and the Illawarra, relieving congestion and providing a seamless, faster journey for the residents, businesses and freight operators of southern Sydney and the Illawarra.

4.8 Buses, light rail and ferries

Buses are the primary form of public transport for many people across NSW. The Government will continue to replenish the bus fleet and cater for service growth. *Sydney's Bus Future* sets out a detailed strategic direction for the Sydney bus network to deliver simpler, faster and better bus services for customers. Buses provide flexible services and bus rapid transit infrastructure can deliver high capacity at relatively low cost.

Light rail will play a much greater role in connecting people in Sydney and Newcastle with major work on delivery of the CBD and South East Light Rail due to be completed in 2019 and Newcastle Light Rail (part of the Newcastle Urban Transformation and Transport Program) commenced. The Government is also planning light rail solutions in the greater Parramatta area.

Ferry services provide a practical commute to Sydney's CBD for customers that reside close to Sydney Harbour and the Parramatta River. Ferries play a unique role in Sydney's public transport system including reducing congestion across other modes of transport.

The following major projects in Table 4.3, currently underway or expected to commence within the next five years, will contribute to delivering the Government's priorities:

Table 4.3: Major projects for buses, light rail and ferries

Project Name	Estimated Total Cost (unless otherwise stated)	Description
CBD and South East Light Rail	\$2.1 billion	New light rail line extending from Circular Quay along George Street to Central Station then to Kingsford via Anzac Parade and Randwick via Alison Road.
Newcastle Light Rail (part of the Newcastle Urban Transformation and Transport Program)	\$206.1 million (2017-18)	Continue revitalisation of Newcastle by introducing light rail services.
Bus Priority Infrastructure (including B-Line)	\$201.5 million (2017-18)	Targeted bus priority works on strategic corridors to increase timetable reliability and reduce delays, includes Northern Beaches and CBD.
446 new and replacement buses	\$170.0 million (2017-18)	Procure bus fleet and accommodate replacement and growth in NSW bus services.
Parramatta Light Rail (planning)	\$25.0 million (2017-18)	Progress investigation of Parramatta Light Rail.
Ferry Fleet Replacement	\$51.6 million	Replace some of Sydney's First Fleet Ferries.
Growth Services Parramatta River	\$25.0 million	Provide additional ferries for Parramatta River.
Barangaroo Ferry Wharf	\$3.3 million (2017-18)	Complete the construction of a new dual berth ferry wharf at Barangaroo precinct.

4.9 Regional and interstate transport

Safe, efficient and reliable transport connections are vital to regional communities and businesses. Regional and interstate transport infrastructure supports the regional economy and quality of life by connecting regional communities, allowing access to employment opportunities and supporting freight movements.

Key regional and interstate transport infrastructure strategic priorities include:

- upgrading regional road and rail networks, particularly those linking the regions with Sydney and interstate destinations
- supporting improvements on the major freight rail routes
- reserving regional transport corridors and investigating future investment requirements.

The following major projects in Table 4.4, currently underway or expected to commence within the next five years, will contribute to delivering the Government's priorities and growing the economies of regional New South Wales:

Table 4.4: Major projects for regional and interstate transport

Project Name	Estimated Total Cost (unless otherwise stated)	Description
 Pacific Highway – Major Projects Oxley Highway to Kundabung Kundabung to Kempsey Warrell Creek to Nambucca Heads Woolgoolga to Ballina Coffs Harbour Bypass (planning) 	The Commonwealth Government is contributing up to \$5.6 billion from 2013-14 towards upgrading the Pacific Highway. The NSW Government will contribute \$364.5 million in 2017-18.	Staged upgrade to increase dual carriageway length as part of the current jointly funded program to improve travel times, road safety, freight efficiency and traffic conditions on the Pacific Highway. Funding for this program includes Commonwealth Government and Restart NSW contributions.
Princes Highway – Major Projects Foxground and Berry Bypass Albion Park Rail Bypass Berry to Bomaderry upgrade Princes Motorway improvements, Bulli Tops to Picton Road Princes Motorway, Interchange at Base of Mount Ousley (planning) Nowra Bridge over the Shoalhaven River Batemans Bay Bridge Replacement Dignams Creek Realignment Burrill Lake Bridge Replacement	\$136.8 million (2017-18)	Upgrades to sections of the Princes Motorway/Highway to improve road safety, reduce travel time and improve local amenity. Some projects include Commonwealth Government, Restart NSW and/or Rebuilding NSW contributions.

Table 4.4: Major projects for regional and interstate transport (cont)

Project Name	Estimated Total Cost (unless otherwise stated)	Description
Central Coast Roads – Major Projects Pacific Highway, Wyong Town Centre (planning) Pacific Highway, Ourimbah Street, Lisarow to Glen Road, Ourimbah Pacific Highway, Parsons Road, Lisarow to Ourimbah Street, Lisarow Pacific Highway and Manns Road, Narara Creek Road, Narara to Parsons Road, Lisarow Pacific Motorway widening, Kariong Interchange to Somersby Interchange Pacific Motorway widening, Wyong Road to Doyalson Link Pacific Highway, Wyong Road Intersection Upgrade Warnervale Link Road, Albert Warner Drive, Warnervale to Pacific Highway (planning) Wyong Road, Mingara Drive to Tumbi Road Upgrade	\$188.2 million (2017-18)	Upgrade to key sections of the Central Coast road network to support population growth, reduce travel times, improve safety and enhance the critical M1 Pacific Motorway link between Sydney, the Central Coast and Newcastle. Some projects include Rebuilding NSW and/or Commonwealth Government funding contributions.
 Bridges for the Bush Program Oxley Highway, Gunnedah Bridge over Rail Cobb Highway, second bridge over the Murray River (NSW contribution) Sportsmans Creek Replacement Bridge Bruxner Highway, Tabulam Bridge over the Clarence River Program 2: Timber Truss Bridge Upgrades and Replacements Program 3: Bridges for the Bush (planning) 	\$68.1 million (2017-18)	Program to replace and upgrade bridges on key freight routes in regional NSW. These works will enable use of high productivity vehicles. Staged construction commenced in 2013-14. These works include Restart NSW, Rebuilding NSW and/or Commonwealth and Victorian Government contributions.
Hunter Roads – Major Projects Cormorant Road, Industrial Drive to Stockton Bridge Newcastle Inner City Bypass, Rankin Park to Jesmond Pacific Motorway (M1) and Weakleys Drive Pacific Motorway (M1) Extension to Raymond Terrace Hunter Pinch Points	\$48.9 million (2017-18)	Planning and investment for works to address localised impact of mining related activity and population growth. Some projects include Restart NSW, Rebuilding NSW and/or Commonwealth Government funding contributions.
Great Western Highway – Major Projects Forty Bends and Hartley Valley Safety Improvements Katoomba to Mount Victoria Safety Works	\$18.7 million (2017-18)	Upgrade projects for the road network between Sydney and Central Western NSW. Some projects on the Great Western Highway include Commonwealth Government funding contributions.

Table 4.4: Major projects for regional and interstate transport (cont)

Project Name	Estimated Total Cost (unless otherwise stated)	Description
 Newell Highway Overtaking lanes program Parkes Bypass (planning) Realignment at Grong Grong Realignment at Trewilga Heavy duty pavement upgrades between Mungle Back Creek and Boggabilla Improvements through Coonabarabran (planning) New Dubbo Bridge (planning) Narrabri to Bellata Heavy Duty Pavement (planning) North Moree Heavy Duty Pavement (planning) West Wyalong Heavy Vehicle Bypass 	\$57.9 million (2017-18)	Upgrades to improve safety, increase overtaking opportunities, address impacts of traffic through regional towns, and support improved freight productivity. Part of a \$500 million NSW Government commitment from Rebuilding NSW. Some projects include Commonwealth Government funding contributions.
New England Highway Bolivia Hill upgrade Heavy duty pavement upgrades Scone Bypass Belford to Golden Highway Upgrade (planning) Gowrie Gates, Widen Rail Underpass Muswellbrook Bypass (planning) Singleton Bypass (planning) Tenterfield heavy vehicle bypass (planning)	\$78.9 million (2017-18)	Program of works to improve safety and freight productivity, address localised impact of mining related activity and population growth. Some projects include funding contributions from Rebuilding NSW and/or the Commonwealth Government.
Other Regional NSW Major Road Upgrades Barton Highway improvements Mitchell Highway, Guanna Hill realignment Queanbeyan Bypass (Ellerton Drive Extension) Summerland Way, additional Grafton Bridge over the Clarence River Gocup Road Upgrade Golden Highway safety, widening and flood alleviation works Heavy Vehicle Safety and Productivity Program	\$287.6 million (2017-18)	Upgrades to improve safety and freight productivity in regional NSW. Some projects include Restart NSW, Rebuilding NSW and/or Commonwealth Government funding contributions.
Journey Reliability	\$42.1 million (2017-18)	Program of works to support road network reliability across New South Wales. Works under this program include installation of overtaking lanes, flood mitigation and sealing of gravel roads.

4.10 International gateways

The State's international gateways are a crucial element in sustaining our productivity and competitiveness. Significant growth is forecast over the next 20 years in interstate and international travel and freight movement. The following strategic priorities are accommodated over the life of this SIP:

- planning for the Western Sydney Airport and supporting road upgrades
- · improving the Sydney Airport precinct road network
- · improving public transport to Sydney Airport
- · upgrades to regional airports
- improving freight rail
- · upgrading major motorway connections to the port and airport precinct.

The following major projects in Table 4.5, currently underway or expected to commence within the next five years, will deliver on this strategic vision:

Table 4.5: Major projects for international gateways

Project Name	Estimated Total Cost (unless otherwise stated)	Description
 Road upgrades to support Western Sydney airport at Badgerys Creek The Northern Road, Narellan to Penrith M12 Motorway from the M7 Motorway to The Northern Road Bringelly Road, Camden Valley Way to The Northern Road 	\$3.6 billion (over 10 years)	Major road upgrades and new road infrastructure over ten years to support the development of the Western Sydney Airport at Badgerys Creek. These works include a local roads package to be undertaken by councils. These works include Restart NSW funding and Commonwealth Government contributions.
 Local road upgrades Sydney Airport Area Road Upgrades 	\$287.5 million	Road upgrades around Sydney's Kingsford Smith Airport to help improve traffic flow around the airport and Port Botany.
Moorebank Intermodal Facility	n.a. ^(a)	The Government is working with the Commonwealth Government and the private sector to develop the Moorebank intermodal site to increase the proportion of container movements carried by rail. This is to support growth in container freight volumes and reduce the growth rate in truck movements to and from the port precinct.
Sydney Gateway	\$800.0 million	Sydney Gateway is a link from WestConnex to Sydney Airport and Port Botany, Australia's largest international gateways. The cost is included within the \$16.8 billion estimated total cost for the WestConnex project.

⁽a) The estimated total cost has not been included due to its commercially sensitive nature.

4.11 Health

Delivering on the Premier's commitment to building infrastructure as articulated in the *NSW: Making It Happen* publication is a key priority for NSW Health. NSW Health is on track to deliver a significant number of major healthcare projects over the next five years.

Like health systems around the world, the NSW health system faces considerable challenges to meet increased demand, driven by a growing and ageing population and the increasing prevalence of chronic diseases, while also adopting new healthcare technologies and addressing skills shortages.

NSW Health is continuing to implement a number of strategies to address these challenges, including work to deliver better value care, implementing alternative models of care, preventative health initiatives and investing in digital health and data analytics, as detailed in section 4.19 Major ICT and Digital Projects.

Table 4.6 below outlines NSW Health's new major projects commencing in 2017-18, and works progressing:

Table 4.6: Major projects for health

Project Name	Estimated Total Cost (unless otherwise stated)	Description
Campbelltown Hospital Redevelopment Stage 2, Mental Health and South West Paediatric	\$632.0 million	This project will continue works on the Campbelltown Hospital Redevelopment, following completion of Stage 1.
Service		Stage 2 will expand key clinical and support services, including the emergency department, mental health inpatient services, diagnostic, critical care, inpatient and ambulatory care facilities. The project will also provide enhanced paediatric services for the growing communities of South West Sydney.
Coffs Harbour Hospital Expansion	\$156.0 million	This project will deliver refurbishment and expansion to increase the hospital's capacity including new theatres, a new short stay surgical unit, acute inpatient beds, ambulatory care, emergency department and the expansion of community health.
Concord Hospital (1A and 1B) Upgrade	\$341.2 million	The upgrade will increase acute service delivery capacity and improve the condition of clinical infrastructure on campus. The project will deliver the new Rusty Priest Centre for Rehabilitation and Aged Care, including a new Defence Force Centre of Excellence for defence force personnel and NSW emergency services personnel.
Goulburn Hospital Redevelopment	\$120.0 million	The upgrade of Goulburn Hospital will improve capacity through better integrated and modern infrastructure including the emergency department, intensive care unit and theatres, inpatient and ambulatory care services.
Maitland Hospital	\$450.0 million	The new Maitland Hospital will provide an improved, expanded, flexible and contemporary health facility integrated with the Hunter Valley network of hospitals to meet the health needs of the catchment population.

Table 4.6: Major projects for health (cont)

Project Name	Estimated Total Cost (unless otherwise stated)	Description
Hornsby Hospital Redevelopment Stage 2	\$200.0 million	This project will continue the redevelopment of Hornsby Hospital. Stage 2 will provide contemporary facilities allowing integration and co-location of health services. The project will address key clinical service priorities including medical inpatient, critical care, emergency department, and ambulatory care services.
Achieving Integrated Digital Patient Records	\$236.2 million (including expensing)	This investment will improve the digital storage and communication of medical information so that patient records are easy to read, accurate, and more accessible. The project includes the roll out of the electronic medication management system to more NSW public hospitals to support better use of medications in the NSW health system and improve patient safety by reducing medication errors and adverse drug events. The investment also includes linking NSW Ambulance and hospital electronic medical records in 'real time' to support faster and safer transfer of care from NSW Ambulance to hospital emergency departments.
Nepean Hospital and Integrated Ambulatory Services Redevelopment	\$550.0 million	The redevelopment of Nepean Hospital will provide additional capacity and enhanced services across emergency, diagnostic, surgical, maternity and neonatal care, inpatient and ambulatory care services, to respond to growth in demand and needs of the community of the Nepean Blue Mountains Local Health District.
Randwick Campus Reconfiguration and Expansion Stage 1	\$720.0 million	This project will reconfigure and expand the Randwick Hospitals' Campus to enable delivery of contemporary models of care, better integration of clinical services, research, and support services delivery arrangements on the campus. It will include the construction of a new building to accommodate the Prince of Wales emergency department, and provide for expansion of medical imaging capacity, inpatient wards, sterilising services, ambulatory care, and operating theatre reconfiguration.
Shellharbour Hospital Redevelopment Stage 1	\$250.6 million	This project will expand emergency department capacity, increase the capacity of the perioperative and critical care services, provide for increased acute and subacute (including rehabilitation) beds, and expand outpatient services.
Tweed Hospital and Integrated Ambulatory Services Redevelopment	\$534.1 million	This project delivers a new hospital on a greenfield site. It will deliver additional inpatient capacity, expanded emergency department, and enhanced surgical and ambulatory services.

Table 4.6: Major projects for health (cont)

Project Name	Estimated Total Cost (unless otherwise stated)	Description
Wagga Wagga Hospital Redevelopment Stage 3	\$170.0 million	Stage 3 will complete the overall Wagga Wagga Rural Referral Hospital Redevelopment to deliver enhanced sub-acute services including rehabilitation and ambulatory care services, renal dialysis, allied health services, primary and community health, community mental health and additional dental care services.
Wyong Hospital Redevelopment Stage 1	\$200.0 million	This project will include a new Clinical Services Block to accommodate inpatient, outpatient and ambulatory services, clinical and non-clinical support services, and ancillary services.
HealthOne Strategy	\$100.0 million	20 HealthOne sites have been announced under this Strategy. The range of services provided by each HealthOne service will be configured to meet the needs of the local community, and will vary from site to site. Services may include Commonwealth Government-funded general practice and state-funded primary and community health care services, and other government agencies and non-government organisations.
Multipurpose Services (MPS) Strategy	\$300.0 million	This program will continue the investment in the MPS strategy and deliver integrated health services to better meet the needs of rural and remote communities. Planning continues for construction at Barham, Cobar, Tumbarumba, Harden, Braidwood, Yass and
Whole of System Digital Platform	\$286.3 million (including expensing)	Murrurundi. This investment will enhance the digital infrastructure that supports clinical and other health-related systems across the state. It will complete the fast, secure state-wide network at the remaining sites which clinicians use to access data anywhere, any time. Performance and reliability of IT systems will be improved with the upgrading and consolidation of existing hardware into the Government Data Centres. This will reduce the risk of disruption to digital services. The project will support more mobile digital healthcare and next-generation video conferencing for clinicians and patients.
Rural Ambulance Infrastructure Reconfiguration	\$122.1 million	This program of works is progressing to reconfigure rural and regional ambulance infrastructure to respond to service demand. A total of 17 new, rebuilt and updated NSW Ambulance stations have been announced by the NSW Government. Construction is in progress at stations at Ardlethan, Coolamon and Harden. Planning is underway at Griffith, Molong, Bathurst, Kiama, Bay and Basin, and Berry.

Table 4.6: Major projects for health (cont)

Project Name	Estimated Total Cost (unless otherwise stated)	Description
Westmead Hospital Redevelopment	\$750.0 million	The redevelopment of the Westmead Hospital will enhance the tertiary role of the facility and will include the development of a new Acute Services building including intensive care and high dependency services, a cardiac comprehensive care centre, acute imaging, and expansion of ambulatory care services.
Sydney Children's Hospital Network Westmead Redevelopment Stage 1	\$95.0 million	This project will respond to demand for paediatric services from Western Sydney and across NSW. It will contribute to a new expanded Emergency Department, short stay unit, pharmacy and medical imaging services.
Sydney Ambulance Metropolitan Infrastructure Strategy	\$150.0 million	The Strategy will build large new hub stations in key locations in Sydney. Construction is in progress at Bankstown, Blacktown, Kogarah, Liverpool, Penrith, Northmead and Artarmon, and planning is underway for stations at Caringbah and in the Inner West.
Asset Refurbishment / Replacement Strategy – State-wide	\$500.0 million (including expensing)	This 10 year strategy which commenced in 2014-15 will augment the maintenance activities undertaken by Local Health Districts for assets such as major plant (e.g. air conditioning, lifts and other engineering infrastructure).
Northern Beaches Health Service Redevelopment	\$600.0 million	The project involves a partnership with a private hospital operator to design, construct, manage and operate a new Northern Beaches Hospital at Frenchs Forest, treating both public and private patients. The project will also include the redevelopment and service reconfiguration of Mona Vale Hospital and Community Health.

⁽a) See also Major ICT and Digital Projects in Table 4.14.

4.12 Education and training

Education

The Government is committing to improving education outcomes across the state. By facilitating access to quality education services, school infrastructure provision contributes to achieving this goal. The Government has \$25 billion invested in public school education infrastructure across the State in more than 2,200 schools.

The Government is implementing a School Assets Strategic Plan to manage the projected capital and maintenance expenditure requirements for classroom supply and maintenance to 2031.

The School Assets Strategic Plan is underpinned by a Government commitment to commence new major capital works projects in 2017-18 and 2018-19 with an estimated total cost of \$2.2 billion over five years. This funding is part of the Government's commitment to meet the unprecedented forecast enrolment growth over the next 15 years.

In order to deliver an expanded portfolio of major capital projects, School Infrastructure NSW, a newly created specialist assets unit in the Department of Education, is responsible for the planning and delivery of capital works in NSW public schools.

Box 4.3: School Assets Strategic Plan

Funding Allocation: The 2017-18 Budget includes \$2.2 billion additional funding for new schools and upgrades to existing schools to commence over the next two years. This capital funding is expected to support the delivery of around 90 major upgrade and new school projects over the next five years, in addition to the extensive school infrastructure program already underway across New South Wales.

Service delivery objective: Student enrolments in NSW Government schools are projected to grow by 21 per cent, or 164,000 students, over the next 15 years. The record investment in school infrastructure in the 2017-18 Budget will deliver world-class teaching spaces to meet this once in a generation spike in student enrolments while supporting high quality student outcomes.

Implementation: A new specialist unit, School Infrastructure NSW, is being established to oversee the delivery of the State's significant new school infrastructure program to meet growth. School Infrastructure NSW will oversee the implementation of the School Assets Strategic Plan and the delivery of new and renewed public school infrastructure across New South Wales.

Outcome: The School Assets Strategic Plan will deliver:

- new and upgraded schools to meet unprecedented student enrolment growth
- facilities that are readily accessible and flexible to meet the demands of an evolving curriculum, in line with future focused learning principles
- flexible and well connected teaching and learning spaces that enable a variety of teaching and learning practices
- spaces that are engaging and supportive for students and teachers
- technology-rich settings with an emphasis on mobility and flexibility
- a healthy and environmentally sustainable environment
- · innovative, connected outdoor spaces that enable play and collaborative learning.

The following major projects will contribute to delivering the Government's priorities:

Table 4.7: Major projects for education

Project Name	Estimated Total Cost (unless otherwise stated)	Description
New major works to commence in 2017-18 and 2018-19	\$2.2 billion	Around 90 new school and major upgrade projects to commence in 2017-18 and 2018-19. This record investment will deliver world-class teaching spaces to support enrolment growth and high quality teaching and learning outcomes in NSW public schools.
2016-17 School Infrastructure Strategy	\$404.0 million	Three new schools and 16 major upgrades to existing schools to be delivered over the next 4 years under the School Infrastructure Strategy announced in the 2016-17 Budget. This includes six new projects not previously announced.
Major school infrastructure works in progress	\$1.0 billion	Existing major school infrastructure works in progress across the State. This includes a new state-of-the-art high rise school in Inner Sydney and the transformation of Parramatta Public School and Arthur Phillip High School into vertical schools.
School IT infrastructure, equipment and minor works	\$1.0 billion (over 4 years)	Provision for computers and other IT infrastructure across schools, minor capital works and equipment.

Training

TAFE NSW delivers training in all regions of New South Wales to support students to get jobs and to support employers by providing the skilled workforce they need to increase workforce productivity. Through its Strategic Asset Management Plan, TAFE NSW intends to increase its access and reach to enable it to grow student training capacity and enhance its coverage and delivery to regional areas.

The TAFE NSW Strategic Asset Management Plan complements the Government's priorities. The plan covers investment in new modern facilities and reduces unit costs with the divestment of obsolete facilities as these new facilities are commissioned. Proceeds from the divestment will be re-invested through sound business cases to support modern learning environments that are right sized, industry standard, and technology enabled. This increases efficiency and supports completion of qualifications.

The 2017-18 capital expenditure program for the TAFE Commission is \$131.0 million.

The following projects in Table 4.8 are currently underway or are expected to commence within the next five years and will contribute to the delivery of the Government's priorities:

Table 4.8: Major projects for training

Project Name	Estimated Total Cost (unless otherwise stated)	Description
TAFE - major works starting in 2017-18	\$35.9 million (\$16.6 million 2017-18)	New additions and upgrades at TAFE locations including Coffs Harbour (Connected Health Hub) and St George (new class facilities). Commencing further stages of the Connected Learning Centres Program to include centres in Bega, Scone, Singleton, Murwillumbah, Yamba, Grenfell, Narrandera, Deniliquin, Bourke and Corowa ³ .
Continuing Major TAFE Projects	\$92.5 million (2017-18)	Upgrades and additions at various TAFE locations including St Leonards (Child Care training facility), Gunnedah, Miller, Wetherill Park, Coffs Harbour (Applied Technology and Plumbing facility), and Kingscliff (Connected Health Hub). Connected Learning Centre Program – Stage 1 with locations at Coonabarabran, Glen Innes, Quirindi, and Tenterfield.

All subject to satisfactory completion of business cases and planning and other considerations.

4.13 Arts and culture

New South Wales is at the forefront of arts and cultural activity, leading the country in cultural employment and screen production. Our arts and cultural facilities support a vibrant and creative New South Wales. Our cultural industries attract and retain the people and skills that the State needs to compete in the global economy.

New South Wales is home to almost 40 per cent of Australia's creative industries and over a third of Australia's creative industry employment. The sector accounts for approximately 7.8 per cent of the State's employment, making a vital and growing contribution to the State's economy.⁴

The following major projects in Table 4.9 are currently underway or expected to commence within the next five years and will contribute to delivering the Government's priorities:

Table 4.9: Major projects for arts and cultur

Project Name	Estimated Total Cost (unless otherwise stated)	Description
Sydney Modern (Art Gallery of NSW)	\$344.3 million ⁵	The Sydney Modern project will increase the local and international reputation of the Art Gallery of NSW, create new and expanded spaces for engagement with art, film and live performances along with spaces to study and participate in cultural programs.
Walsh Bay Arts Precinct	\$207.5 million ⁶	Construction of new and upgraded production, studio, rehearsal and performance venues to support the redevelopment of the Walsh Bay Arts Precinct.
Sydney Opera House Stage 1 Renewal	\$202.0 million	Design upgrades to entry points and foyers, new creative learning and function centres, and improvements to the Concert Hall as part of Stage 1 of the Opera House's Decade of Renewal.
New Museum in Western Sydney (planning)	\$10.0 million	Planning for the extended business case for the New Museum in Western Sydney that will be the flagship campus for the Museum of Applied Arts and Sciences.

4.14 Energy

The New South Wales gas market is facing a period of significant change in both supply and demand over the coming years. The Government, through the NSW Gas Plan, is creating a framework to secure gas supplies for New South Wales by establishing a safe, secure gas industry in the state.

Combined with rapid advancements in energy generation, storage and efficiency technologies, these trends present a number of challenges and opportunities in ensuring customers have access to clean, affordable, and reliable energy. The following actions are strategic priorities for the State's electricity infrastructure:

 the lease of 49 per cent of the NSW electricity network businesses with the successful long-term lease of TransGrid and partial lease of Ausgrid and Endeavour Energy now finalised to drive further efficiencies and benefits to consumers

SGS Economics and Planning, Valuing Australia's Creative Industries Final Report Creative Industries Innovation Centre December 2013, http://www.sgsep.com.au/assets/Valuing-Australias-Creative-Industries-Final-Report.pdf

Sydney Modern total ETC includes private contributions.

Includes \$11 million allocated for planning in 2015-16.

- · developing the State's resources responsibly, including through the NSW Gas Plan
- attracting investment opportunities presented by emerging energy generation, storage and efficiency technologies
- increasing generation and demonstrating new generation and storage technologies through the NSW Renewable Energy Action Plan and the Climate Change Fund.

4.15 Water

Water security underpins the economic prosperity of our regional towns and centres. It is fundamental to driving the sustainable growth of our \$12 billion primary industries sector. The Government has established a dedicated \$1 billion Safe and Secure Water Fund as part of the Rebuilding NSW initiative in order to respond to water challenges.

The Government will continue to improve water infrastructure so that regional communities have a secure, sustainable and affordable water supply that meets drinking water quality and effluent guidelines. The Safe and Secure Water Fund will ensure regional communities have reliable access to good quality water supplies by replacing aged assets and bringing systems up to modern standards.

The following major projects in Table 4.10 are currently underway or expected to commence within the next five years and will contribute to delivering the Government's priorities:

Table 4.10: Major projects for water

Project Name	Estimated Total Cost (unless otherwise stated)	Description
Broken Hill Water Supply	n.a. ⁷	Emergency and long-term solutions to the water needs of Broken Hill and surrounding districts, scheduled for completion by 2019.
Regional Water and Waste Water Backlog	Up to \$110 million	Up to 37 water and waste water infrastructure projects including new sewerage treatment plants and drinking water supply projects.
Sydney Water Customer Experience Platform (CxP)	\$156.0 million	A replacement billing and customer relationship management system that will provide a more customer-centric approach across a common platform, that will help the business operate more efficiently and respond more quickly to market and regulatory changes.
Sydney Water Business Experience Platform (BxP)	\$85.7 million	Implementation of a modern unified Enterprise Resource Planning (ERP) platform to support business agility, greater efficiency and responsiveness to change.
Riverstone Wastewater Treatment Plant Amplification	\$113.2 million	Amplification of the plant to provide treatment capacity to meet the demand generated by the growth within the North West Growth Centre up to 2022, as per Sydney Water's commitment in its Growth Servicing Plan.
Growth Centre Works	\$775.0 million (2017-18 to 2020-21)	Water and wastewater system and sewerage treatment plant works over the next four years to service new urban development in Sydney's North West and South West Growth Centres and a number of other minor greenfield and infill growth areas.

The estimated cost has not been included due to its commercially sensitive nature.

4.16 Justice

The Government has invested significantly in the Justice Cluster as part of the vision to create a safe and just place for the people of NSW.

The most significant commitment of funds has been for additional beds in correctional centres. Other areas of investment include support of new service delivery models within the justice and emergency management service delivery systems, addressing caseload pressures in the District Court system, prioritised focus to provide fit-for-purpose facilities that align with future demand, and ongoing roll-out and upgrades to ICT infrastructure.

The following major projects currently underway or to commence within the next five years will contribute to delivering these strategic priorities:

Table 4.11: Major projects for justice

Project Name	Estimated Total Cost (unless otherwise stated)	Description
Prison Bed Capacity Program	\$2.4 billion	Capital funding component of the \$3.8 billion program to create capacity to meet inmate population growth, which will help with the reconfiguration of the corrections network and drive improved sustainability of custodial facilities.
Grafton Prison	n.a. ⁸	Establishment of a new 1,700 bed facility at Grafton in Northern NSW.
Counter Terrorism	\$17.0 million	Capital component of the \$47 million program to implement a multi-faceted approach to combatting terrorism and radicalisation within the NSW correctional system, including centralised support for supervision of terror related offenders.
Criminal Courts	\$13.5 million ⁹	Additional criminal courts to address backlogs and growing demands in Sydney CBD and in Parramatta.

4.17 Sporting facilities

In the Rebuilding the Major Stadia Network program, the Government has identified the strategic priorities for major stadia investment.

In 2017-18, the construction of the new Western Sydney Stadium will continue and the Government will consider feasibility studies and business cases for the redevelopment of Stadium Australia and an indoor arena.

The following major projects in Table 4.12 are currently underway or expected to commence within the next five years and will contribute to delivering the Government's priorities:

Table 4.12: Major projects for sporting facilities

Project Name	Estimated Total Cost (unless otherwise stated)	
Western Sydney Stadium	\$160.0 million (2017-18)	Construction of a new stadium at Parramatta on the site of the previous facility.

⁸ The estimated cost has not been included due to its commercially sensitive nature.

⁹ Allocated from the Criminal Justice Reform Program.

4.18 Social housing

The Government's investment in *Future Directions* for social housing includes:

- providing more social housing
- · creating more opportunities, support and incentives to avoid or leave social housing
- providing a better social housing experience.

To deliver on this a number of initiatives are well underway including those which will directly deliver social housing stock - such as the \$22 billion Communities Plus program - and those which deliver social housing supply through strategic commissioning approaches - such as the \$1.1 billion Social and Affordable Housing Fund.

The Communities Plus initiative will deliver more social housing and new mixed community housing made up of 23,000 new and replacement social dwellings, 500 affordable dwellings and 40,000 private dwellings. Major projects announced to date include Riverwood, Waterloo, Ivanhoe, Telopea and Arncliffe as well as developments in metropolitan Sydney and regional areas. In addition, the Millers Point sales program has delivered 794 new and better homes completed or under construction in areas of high demand with more than 700 further dwellings to be delivered.

The following major investments in Table 4.13 in 2017-18 contribute to delivering the State's strategic priorities:

Table 4.13: Major projects for social housing

Project Name	Estimated Total Cost (unless otherwise stated)	Description
Upgrading existing public housing	\$217.5 million (2017-18)	Upgrades and improvements to social housing.

4.19 Information and Communications Technology and Digital

The Government's Digital Strategy aims to make government more open, connected, customer focused and outcomes driven.

Digital government requires investment in the right technology to deliver simple, accessible and adaptive services. The ICT Assurance Framework ensures the application of an independent risk-based assurance process for NSW's capital and recurrent ICT projects.

For the first time, the 2018 State Infrastructure Strategy will consider future digital trends and connectivity infrastructure requirements that NSW will need over the next 20 years.

The following major ICT investments in Table 4.14 in 2017-18 contribute to delivering the State's strategic priorities and Digital Strategy.

Table 4.14: Major ICT and Digital projects

Project Name	Estimated Total Cost (unless otherwise stated)	Description
Health: Achieving Integrated Digital Patient Records	\$236.2 million (including expensing)	This investment will improve the digital storage and communication of medical information so that patient records are easy to read, accurate, and more accessible. The project includes the roll out of the electronic medication management system to more NSW public hospitals to support better use of medications in the NSW health system and improve patient safety by reducing medication errors and adverse drug events. The investment also includes linking NSW Ambulance and hospital electronic medical records in 'real time' to support faster and safer transfer of care from NSW Ambulance to hospital emergency departments.
Health: Whole of System Digital Platform	\$286.3 million (including expensing)	This investment will enhance the digital infrastructure that supports clinical and other health-related systems across the state. It will complete the fast, secure statewide network at the remaining sites which clinicians use to access data anywhere, any time. Performance and reliability of IT systems will be improved with the upgrading and consolidation of existing hardware into the Government Data Centres. This will reduce the risk of disruption to digital services. The project will support more mobile digital healthcare and next-generation video conferencing for clinicians and patients.
Finance: Critical Communications Enhancement Program	\$163.2 million (2017-18 to 2018-19)	Capital investment of \$163.2 million over two years to invest in enhanced communications services required by frontline agency staff in the delivery of emergency, law enforcement, and essential community services to the people of NSW. NSW Telco Authority is managing the roll out of the network commencing in the North Coast of NSW.

Table 4.14: Major ICT and Digital projects (cont)

Project Name	Estimated Total Cost (unless otherwise stated)	Description
Sydney Water Customer Experience Platform (CxP)	\$156.0 million	A replacement billing and customer relationship management system that will provide a more customer-centric approach across a common platform, that will help the business operate more efficiently and respond more quickly to market and regulatory changes.
Sydney Water Business Experience Platform (BxP)	\$85.7 million	Implementation of a modern unified Enterprise Resource Planning (ERP) platform to support business agility, greater efficiency and responsiveness to change.
Justice: Policing for Tomorrow Technology Fund	\$51.0 million (2017-18)	\$51 million capital in 2017-18 to continue implementation of the four year \$100 million Policing for Tomorrow Technology Fund, providing the NSW Police Force with state-of-the-art technology to fight crime and enhance officer mobility.
Environment: Biodiversity Reform digital and ICT platforms	\$18.1 million	Key digital and ICT tools to support the operation of the Biodiversity Reforms and new biodiversity offsets scheme. This will also support integrated ICT systems across Office of Environment and Heritage and Local Land Services.
NSW Electoral Commission online systems	\$12.8 million	Online systems totaling \$10.3 million in recurrent funds and \$12.8 million in capital expenditure from 2017-18 to 2020-21 will include an end-to-end solution for the disclosure of political donations, expenditure and the lodgment of public funding claims, and improvements to iVote system.
Planning: ePlanning – Stage 3 Acceleration of Online Housing Approvals	\$11.8 million	Cloud Based DA assessment system for regional councils and small metropolitan councils with low capability. Replaces disparate paper processes that are time consuming to applicants with electronic workflows of the NSW Planning Portal to reduce delays in the planning system.