

A. STATE INFRASTRUCTURE PLAN

The 2018-19 State Infrastructure Plan (SIP) highlights key major infrastructure projects that are funded for delivery in the period 2018-19 to 2022-23.

The SIP is designed to highlight selected priority projects the NSW Government will deliver over the next five years. These projects are important both for the direct benefits they will deliver and for the further growth they will unlock. The Government is committed to providing infrastructure that meets the needs of a growing population and a growing economy.

In March 2018, the Government released the *NSW State Infrastructure Strategy 2018-2038*. The *NSW State Infrastructure Strategy 2018-2038* sets out the Government's priorities for the next 20 years, and combined with the *Future Transport Strategy 2056*, the *Greater Sydney Region Plan* and the *Regional Development Framework*, brings together infrastructure investment and land-use planning for our cities and regions.

This Appendix is the Government's 2018-19 State Infrastructure Plan and fulfils the 5-year State Infrastructure Plan requirement under Section 21 of the *Infrastructure NSW Act 2011*. 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*.

The 2018-19 SIP builds on the significant infrastructure investment that is driving growth in the NSW economy.

Box A.1: Our infrastructure investment strategy designed for future prosperity

The SIP continues to build on the unprecedented pipeline of infrastructure with \$87.2 billion in budgeted investment over the next four years. The 2018-19 SIP includes:

- continuing works on Central Coast Roads, including the Pacific Motorway; Great Western Highway and Bells Line of Road; and the New England, Pacific and Princes Highways
- More Trains, More Services, with \$648.2 million in 2018-19
- Liverpool Health and Academic Precinct, estimated total cost (ETC) \$740.0 million
- Statewide Mental Health Infrastructure Program ETC \$700.0 million
- Tweed Hospital and Integrated Ambulatory Services Redevelopment ETC \$582.1 million
- Cooling for Schools ETC \$500.0 million
- various regional and metropolitan new schools
- Relocation of the Powerhouse Museum to Parramatta and planning for a creative industries precinct in Ultimo.

The following sections highlight key major infrastructure projects by sector.

Regional and interstate transport

The *Future Transport 2056 Regional NSW Services and Infrastructure Plan* is the NSW Government's blueprint for transport in regional New South Wales from now until 2056. It sets out the Government's thinking on the big trends, issues, services and infrastructure needs which are now, or will soon, shape transport in regional New South Wales, comprising nine regions outside the Greater Sydney region.

The *Regional NSW Services and Infrastructure Plan* outlines the vision and customer outcomes that the NSW Government will use to go about its detailed transport planning in each of the nine regions and to support its future decision making. The Plan provides a high-level overview for each of the nine regions. A supporting transport plan and vision will be prepared for each region, along with 'place plans' for regional cities and larger centres.

Key regional and interstate transport infrastructure strategic priorities include:

- upgrading regional road and rail networks
- supporting improvements on major freight rail routes
- reserving regional transport corridors and investigating future investment requirements.

The following major projects in Table A.1, 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 A.1: Major projects and programs for regional and interstate transport

Project Name	Estimated Total Cost (unless otherwise stated)	Description
Pacific Highway – Major Projects <ul style="list-style-type: none"> • Woolgoolga to Ballina, duplication to four lane divided road • Coffs Harbour Bypass, from Englands Road to the Pacific Highway at Sapphire 	\$1.2 billion (2018-19)	Staged upgrade to complete a four-lane divided Pacific Highway between Hexham, near Newcastle, and the Queensland border by 2020, improving travel times, road safety, freight efficiency and traffic conditions. Funding has also been committed for construction of the Coffs Harbour bypass. Funding for this program includes Commonwealth Government and Rebuilding NSW contributions.
Other Regional NSW Major Road Upgrades, including: <ul style="list-style-type: none"> • Barton Highway improvements • 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 • Sealing Country Roads - Silver City and Cobb Highway • Oxley Highway safety and realignment works 	\$353.0 million (2018-19)	Upgrades to improve safety and freight productivity in regional NSW. Some projects include Restart NSW, Rebuilding NSW and/or Commonwealth Government funding contributions.

Table A.1: Major projects and programs for regional and interstate transport (cont)

Project Name	Estimated Total Cost (unless otherwise stated)	Description
Princes Highway, including: <ul style="list-style-type: none"> • Albion Park Rail Bypass • Berry to Bomaderry upgrade • Batemans Bay Bridge Replacement • Princes Motorway improvements, Bulli Tops to Picton Road • Princes Motorway, Interchange at Base of Mount Ousley (planning) • Nowra bridge over the Shoalhaven River 	\$244.3 million (2018-19)	Upgrades to sections of the Princes Motorway/Highway to improve road safety, reduce travel time and improve local amenity. A new safety program is being developed for the Princes Highway with \$8.8 million committed for 2018-19 (in addition to the 2018-19 Budget allocation for Princes Highway). Some projects include Commonwealth Government, Restart NSW and/or Rebuilding NSW funding contributions.
Central Coast Roads – Major Projects including: <ul style="list-style-type: none"> • Empire Bay Drive, The Scenic Road and Cochrone Street Intersection Upgrade • Pacific Motorway Widening, Kariong Interchange to Somersby Interchange • Pacific Motorway Widening and Reconstruction, Wyong Road to Doyalson Link • 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 (planning) • Manns Road, Central Coast Highway to Narara Creek Road (planning) • Warnervale Link Road, Albert Warner Drive, Warnervale to Pacific Highway (planning) • Pacific Highway, Wyong Town Centre (planning) 	\$168.2 million (2018-19)	Upgrade 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.
New England Highway, including: <ul style="list-style-type: none"> • Bolivia Hill upgrade • Scone Bypass • Belford to Golden Highway Upgrade • Gowrie Gates, Widen Rail Underpass • Muswellbrook Bypass (planning) • Singleton Bypass (planning) • Tenterfield heavy vehicle bypass (planning) • Heavy duty pavement upgrades 	\$83.6 million (2018-19)	Program of works to improve safety, freight productivity and support regional economic activity and growth. Some projects include funding contributions from Rebuilding NSW and/or the Commonwealth Government.

Table A.1: Major projects and programs for regional and interstate transport (cont)

Project Name	Estimated Total Cost (unless otherwise stated)	Description
Bridges for the Bush Program, including: <ul style="list-style-type: none"> • Gunnedah second road over rail bridge • Cobb Highway, second bridge over the Murray River between Echuca and Moama (NSW contribution) • Bruxner Highway, Tabulam Bridge over the Clarence River • Swan Hill to Deniliquin Road, Gee Gee Bridge over Wakool River • Nerriga Road, Charleyong Bridge near Braidwood • Thunderbolts Way, Barrington Bridge near Gloucester • Mid Western Highway, Lignum Creek Bridge replacement near Marsden 	\$80.9 million (2018-19)	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 funding contributions.
Newell Highway, including: <ul style="list-style-type: none"> • Overtaking lanes acceleration program • Parkes Bypass (planning) • Heavy duty pavement upgrade between Mungle Back Creek and Boggabilla. • Improvements through Coonabarabran (planning) • New Dubbo Bridge (planning and pre-construction) • Narrabri to Bellata Heavy Duty Pavement (planning) • North Moree Heavy Duty Pavement (planning) 	\$61.7 million (2018-19)	Upgrades to improve safety, increase overtaking opportunities, address impacts of traffic through regional towns, and support improved freight productivity. Part of a \$500.0 million NSW Government commitment from Rebuilding NSW. Some projects include Commonwealth Government funding contributions.
Hunter Roads – Major Projects, including: <ul style="list-style-type: none"> • Newcastle Inner City Bypass, Rankin Park to Jesmond (planning and pre-construction) • Pacific Motorway (M1) and Weakleys Drive intersection upgrade • Pacific Motorway (M1) Extension to Raymond Terrace (planning) • Hunter Pinch Points • Cessnock Road, improved flood immunity at Testers Hollow • Nelson Bay Road improvements 	\$54.8 million (2018-19)	Planning and works to support population growth, reduced travel times, improved safety and support regional economic activity and growth. Some projects include Restart NSW, Rebuilding NSW and/or Commonwealth Government funding contributions.

Urban roads

Urban roads facilitate the majority of trips on the transport network by various modes of transport, while providing access to centres and enabling successful places. Strategic priorities for our urban road network include:

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

The following major projects (Table A.2) include those currently underway and those expected to commence over the five years of the SIP.

Table A.2: Major projects and programs for urban roads

Project Name	Estimated Total Cost (unless otherwise stated)	Description
WestConnex	\$16.8 billion	Widening and extending the M4 and 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 between Parramatta and the City West Link, Stage 2 is the New M5 and Stage 3 is a new tunnel linking the M4 and M5 motorways and the Sydney CBD. The project also allocates \$800.0 million to Sydney Gateway. Funding for WestConnex includes Commonwealth Government and Restart NSW contributions.
NorthConnex (M1 to M2)	\$3.0 billion	A 9 kilometre motorway tunnel linking the M1 and M2. Funding for NorthConnex includes Commonwealth Government and private sector contributions.
Easing Sydney's Congestion (Pinch Points and Clearways)	\$922.5 million	Measures to relieve traffic congestion on Sydney's roads and improve network efficiency at key traffic hotspots.
Northern Beaches Hospital, Road Connectivity and Network Enhancements	\$700.0 million	Road upgrades to support the new Northern Beaches Hospital at Frenchs Forest. Includes a Restart NSW funding contribution.
M4 Smart Motorway	\$470.0 million	Intelligent technology, known as a motorway management system, is being introduced to the M4 Motorway to increase trip reliability and improve road safety. Includes a Rebuilding NSW funding contribution.

Table A.2: Major projects and programs for urban roads (cont)

Project Name	Estimated Total Cost (unless otherwise stated)	Description
Western Sydney Growth Roads Program – Major Projects include: <ul style="list-style-type: none"> • 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 • Mulgoa Road Upgrade - Blaikie Road to M4 Motorway (Stage 1) • Campbelltown Road upgrade (Stage 1) • Appin Road improvements • Spring Farm Parkway, Stage 1 (planning) • The Horsley Drive, M7 Motorway to Cowpasture Road (planning) 	\$132.2 million (2018-19)	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 the Western Sydney Employment Area. The aim is to link the Greater Sydney workforce and business community with broader employment opportunities and markets, including through national and international gateways. Funding for this program includes Commonwealth Government and Restart NSW contributions.
Western Harbour Tunnel and Beaches Link (planning and preconstruction)	\$130.0 million (2018-19)	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 and Wakehurst Parkway. Funding for this program includes Rebuilding NSW contributions.
F6 Extension Stage 1	\$40.7 million (2018-19)	The F6 Extension Stage 1 - between the WestConnex New M5 at Arncliffe and President Avenue, Kogarah - will provide a connection for motorists from southern Sydney to the wider Sydney motorway network. This will improve travel times, bypass up to 23 sets of traffic lights on the Princes Highway between St Peters and Kogarah, remove up to 2,000 heavy vehicles per day and ease congestion on the local road network. Includes a Rebuilding NSW funding contribution.

International gateways

The State's international gateways are crucial to sustain 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 the SIP:

- upgrading motorway connections to the Port Botany and Sydney Airport precincts
- providing road upgrades to support the new Western Sydney Airport
- improving the Sydney Airport precinct road network
- improving public transport to Sydney Airport
- improving freight rail.

In May 2018, the Commonwealth Government announced a commitment of \$400.0 million for the Port Botany freight rail line, to duplicate the remaining single track between Mascot and Botany and construct a passing loop at Cabramatta, designed to drive economic growth, improve freight movements and increase connectivity to Port Botany. This project will be delivered by the Australian Rail Track Corporation.

The following major projects in Table A.3, currently underway or expected to commence within the next five years, will deliver on this strategic vision.

Table A.3: Major projects and programs for international gateways

Project Name	Estimated Total Cost (unless otherwise stated)	Description
Road upgrades to support Western Sydney Airport at Badgerys Creek <ul style="list-style-type: none"> The Northern Road, Narellan to Penrith M12 Motorway linking the M7 Motorway with the new airport Bringelly Road, Camden Valley Way to The Northern Road Local road upgrades 	\$3.6 billion (over 10 years)	Major road upgrades and new road infrastructure over 10 years to support the development of Western Sydney Airport at Badgerys Creek. These works include a local roads package being delivered by councils. These works include Restart NSW and Commonwealth Government funding contributions.
Sydney Airport Area Road Upgrades	\$74.5 million (2018-19)	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 NSW 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 (planning)	\$7.5 million (2018-19)	Sydney Gateway will provide an improved road connection between WestConnex and Sydney Airport and Port Botany, Australia's largest international gateways. A total of \$800.0 million will be provided from the WestConnex project.

(a) Commonwealth Government and private sector funded.

Passenger trains

The strategic direction for the rail network is set out in *Future Transport 2056*, the long term plan for transport across New South Wales.

To support the land use vision for Greater Sydney, the NSW Government developed a vision for the transport system that will enable people and goods to move conveniently around the city. It will enable people within each city to access their nearest metropolitan and strategic centres within 30 minutes by public transport. The future vision for our train system is to build on this role, supporting the vision for 30 minute access for customers to their nearest metropolitan city centre and providing high capacity transport between them.

Future Transport 2056 identifies several initiatives to improve rail connectivity between Greater Sydney, Newcastle and Wollongong. Faster travel times would enable opportunities to support housing supply, economic growth and regional development.

The NSW Government has been actively investing and expanding Sydney's rail network to both improve the existing lines and to provide new lines to serve areas previously not accessible by train, such as Sydney Metro and the North-South Rail for Western Sydney Airport Stage 1 to service the Western Parkland City.

Sydney's existing train network will continue to be the most significant component of Greater Sydney's public transport system for customers. More Trains, More Services is a service capacity upgrade program designed to transform the existing rail system using changes in technology and innovation to create integrated, automated, high capacity turn up and go services.

Better separation of freight and passenger trains is a priority within the plans for the future rail network, particularly the need for dedicated links between Port Botany and intermodal terminals in Greater Sydney and regional New South Wales.

Passenger rail projects include:

- Sydney Metro Northwest, a metro line between North West Sydney and Chatswood, the first part of the new Sydney Metro Network, due to open in the first half of 2019
- Sydney Metro City and Southwest, a metro line linking Sydney Metro Northwest at Chatswood with the Sydney CBD, including stations at Barangaroo, Martin Place and Waterloo, and continuing southwest to Bankstown via Sydenham
- Sydney Metro West, planning and early procurement for a new metro line between Parramatta and Sydney central business districts
- New state-of-the-art intercity trains as part of the New Intercity Fleet procurement
- More trains on the suburban passenger network to provide rail customers with more frequent services and additional express services
- Planning for accessibility upgrades at North Strathfield, Kingswood, Hazelbrook, Wyee, Blayney, Mittagong, Clarendon, Hawkesbury River, Wahroonga, Taree, Roseville and further progression of Glenbrook, Beecroft, Millthorpe and Como stations
- New trains for regional rail services, by replacing the older ageing diesel fleet to meet customer and service requirements for regional rail services
- Planning for a future rail link servicing Western Sydney Airport at Badgerys Creek.

The following major projects (Table A.4) include those currently underway and those expected to commence over the five years of the SIP, which support the strategic direction for rail:

Table A.4: Major projects and programs for passenger trains

Project Name	Estimated Total Cost (unless otherwise stated)	Description
Sydney Metro Northwest	\$8.3 billion	A line from Tallawong Station in North West Sydney to Chatswood as part of a new Sydney Metro Network (includes rolling stock).
Sydney Metro City and Southwest	\$1.9 billion (2018-19)	A Metro line linking Chatswood with Bankstown including a second harbour rail crossing as part of the new Sydney Metro network (includes rolling stock). Includes a Rebuilding NSW funding contribution.
More Trains, More Services	\$648.2 million (2018-19)	Modernisation of rail infrastructure and enhancements to fleet to increase rail services and improve the travel experience and connectivity across the network, including express services for Western Sydney. This program includes new funding to modernise rail technology to enable additional services for customers. The program will focus on delivering improvements for T4 Eastern Suburbs and Illawarra Line, T8 Airport and South Line and South Coast Line customers. Includes Rebuilding NSW funding contributions.
New Intercity Fleet	\$495.7 million (2018-19)	A new fleet of state-of-the-art intercity trains, providing over 500 new carriages, which will carry passengers to the Central Coast, Newcastle, the Blue Mountains and the Illawarra. A new purpose-built train maintenance facility will be built at Kangy Angy on the Central Coast. Includes Restart NSW funding contributions.
Automatic Train Protection	\$186.0 million (2018-19)	Progressively fit the network and fleet with a modern signaling, control and train protection system in the driver's cabin that interfaces with the trackside signaling system.
Transport Access Program	\$132.9 million (2018-19)	Improvements to provide a better experience for public transport customers by delivering accessible, modern, secure and integrated transport infrastructure where it is needed most.
Central Walk	\$132.4 million (2018-19)	A new underground pedestrian concourse at Central Station to better connect passengers to trains, buses, light rail and the new Sydney Metro.
North-South Rail for Western Sydney Airport Stage 1 (planning, State and Federal Funded)	\$35.0 million (2018-19)	This supports planning and the final business case for the North-South Rail Stage 1 to service the new Western Sydney Airport, as part of a joint funding commitment of \$100.0 million between the Commonwealth and NSW Governments through the Western Sydney City Deal. Stage 1 will link St Marys with the new Western Sydney Airport and the Western Parkland City.

Table A.4: Major projects and programs for passenger trains (cont)

Project Name	Estimated Total Cost (unless otherwise stated)	Description
Regional Rail Fleet Program	\$31.3 million (2018-19)	Continue procurement to replace the ageing XPT, XPLOER and Endeavour trains to meet customer and service requirements for regional rail services, including a new maintenance facility at Dubbo as the preferred location.
Sydney Metro West (planning)	\$28.1 million (2018-19)	\$3.0 billion Restart reservation for the Sydney Metro West, which is the city's next underground metro railway and will provide the fastest, easiest and most reliable journey between the Sydney CBD and Greater Parramatta. This funding, subject to the final business case and the requirements of the <i>Restart Act (2011)</i> , will fund completion of project development and commencement of land acquisition, early works and tunnelling. The NSW Government will also invest \$28.1 million in 2018-19 to continue the planning and the final business case for this project.
Power Supply Upgrades	\$21.8 million (2018-19)	Upgrades and new construction designed to meet expected power requirements for Sydney's future rail network and new air-conditioned fleet.

Buses and light rail

Buses are the primary form of public transport for many people across New South Wales. The NSW Government will continue to replenish the bus fleet and cater for service growth. *Future Transport 2056* sets out a strategic direction for the 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 and Newcastle Light Rail (part of the Newcastle Urban Transformation and Transport Program) underway. Construction of a new light rail line connecting Parramatta with Westmead and Carlingford will commence by the end of 2018.

The following major projects in Table A.5, currently underway or expected to commence within the next five years, will contribute to delivering the Government's priorities:

Table A.5: Major projects and programs for buses and light rail

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 on to Moore Park, Kingsford and Randwick.
Parramatta Light Rail Stage 1	\$258.0 million (2018-19)	New light rail line linking Westmead and Carlingford via Parramatta. Includes Restart NSW and Rebuilding NSW funding contributions.
New and Replacement Buses	\$179.4 million (2018-19)	Purchase new buses to accommodate growth in NSW bus services and to replace old buses.
Bus Priority Infrastructure (including B-Line)	\$156.7 million (2018-19)	Targeted bus priority works on strategic corridors to increase timetable reliability and reduce delays, including the Northern Beaches. Includes Rebuilding NSW funding contributions.
Newcastle Light Rail (part of the Newcastle Urban Transformation and Transport Program)	\$110.2 million (2018-19)	Revitalise Newcastle by introducing modern, high capacity and frequent light rail services, including the new Wickham transport interchange.
Parramatta Light Rail Stage 2 (planning)	\$20.0 million (2018-19)	Planning for Stage 2 of the Parramatta Light Rail, which will run north of the Parramatta River through the rapidly developing suburbs of Ermington, Melrose Park and Wentworth Point to Sydney Olympic Park.
Macquarie Park Transport Interchange (planning, State and Federal Funded)	\$9.2 million (2018-19)	Planning for upgrade works to improve customer safety and amenity and address expected growth in the precinct around Macquarie University. Includes a Commonwealth Government contribution.

Health

The Government will invest \$8.0 billion over the next four years to continue to deliver world class health care facilities for the people of New South Wales and meet the Premier's priority of delivering infrastructure on time and on budget.

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 health care technologies and addressing skill shortages.

NSW Health is continuing to implement a number of strategies to address these challenges, including work to deliver value based health care, preventative health initiatives and investing in digital health and data analytics. NSW Health is constructing future focused health facilities that support patient centred care and which are able to adapt to changing health care service delivery and technologies.

Table A.6 outlines NSW Health's major works greater than \$100.0 million that will continue to be progressed and new major works commencing in 2018-19:

Table A.6: Major projects and programs for health

Project Name	Estimated Total Cost (unless otherwise stated)	Description
Campbelltown Hospital Redevelopment Stage 2, Mental Health and South West Paediatric Service (Rebuilding NSW S&H Fund)	\$632.0 million	This project will continue the redevelopment of Campbelltown Hospital, following completion of Stage 1. Stage 2 will expand key clinical and support services, including the emergency department, mental health inpatient services, surgical, diagnostic, critical care, inpatient and ambulatory care facilities. The project will also provide facilities for enhanced paediatric services for the growing communities of South West Sydney.
Coffs Harbour Hospital Expansion	\$194.0 million ^(a)	This project will increase the hospital's capacity including a new emergency department, operating theatres, additional critical care and inpatient beds, as well as increased capacity for chemotherapy and renal dialysis.
Concord Hospital (1A and 1B) Upgrade	\$341.2 million	The upgrade will increase inpatient capacity in medical, aged, cancer care and subacute services and increase rehabilitation ambulatory care capacity in enhanced clinical infrastructure. 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 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.
Hornsby Hospital Redevelopment Stages 1 and 2	\$321.0 million ^(a)	This project will continue the redevelopment of Hornsby Hospital. Stage 2 will provide contemporary facilities to support the integrated service models. The project will expand facilities for medical and subacute inpatient, critical care, emergency department and surgical and procedural services.
Liverpool Health and Academic Precinct	\$740.0 million	The project will enhance cancer care services, expand neonatal intensive care, maternity and critical care capacity in addition to delivering facilities to enhance emergency, inpatient, surgical, diagnostic and ambulatory care services. This project will enable the hospital to respond to demand arising from significant population growth in South Western Sydney.
Maitland Hospital (new)	\$470.0 million ^(a)	The New Maitland Hospital will provide a contemporary health facility with the capacity to deliver new and expanded emergency, inpatient, maternity and neonatal, diagnostic, critical care, cancer care, interventional and ambulatory care services integrated with the Hunter Valley network of hospitals to meet the health needs of the growing local population.

Table A.6: Major projects and programs for health (cont)

Project Name	Estimated Total Cost (unless otherwise stated)	Description
Nepean Hospital and Integrated Ambulatory Services Redevelopment	\$550.0 million	The project will deliver additional capacity for emergency, diagnostic, surgical, maternity and neonatal care, inpatient and ambulatory care services, to respond to the growth in demand and health needs of the Nepean Blue Mountains Local Health District. Planning for Stage 2 of the redevelopment will be progressed in 2018-19.
Randwick Campus Reconfiguration and Expansion Stage 1	\$720.0 million	This project will expand the Randwick Hospitals' Campus to include a new Acute Services Building for the Prince of Wales Hospital to accommodate a new Emergency Department and assessment capacity, Psychiatric Emergency Care Centre, expanded Intensive Care Unit, inpatient units, operating theatres, helipad, and teaching, education and research spaces.
Shellharbour Hospital Redevelopment Stage 1	\$250.6 million	This project will provide new and expanded emergency department capacity, operating theatres, additional acute and subacute inpatient beds, and clinical support services in modern facilities designed for the delivery of integrated and patient-centred care.
Tweed Hospital and Integrated Ambulatory Services Redevelopment	\$582.1 million ^(a)	This project delivers a new hospital on a greenfield site. A new hospital with additional capacity for inpatient and critical care, emergency department, surgical and interventional services, diagnostic and ambulatory services as well as expanded cancer care services including radiotherapy will be constructed.
Statewide Mental Health Infrastructure Program	\$700.0 million	The program includes an immediate focus on improving therapeutic environments in mental health facilities as well as expanding statewide services for children, adolescents and older persons, forensic services and facilities to support recovery and transition to community based care.
Wagga Wagga Base Hospital Redevelopment	\$431.4 million ^(a)	The final stage of the Wagga Wagga Base Hospital Redevelopment will deliver enhanced facilities for sub-acute services including rehabilitation and ambulatory care services as well as for renal dialysis, allied health services, primary and community health, community mental health and additional dental care services.
Westmead Hospital Redevelopment	\$765.0 million ^(a)	The redevelopment of the Westmead Hospital will include a new Central Acute Services Building for intensive care and high dependency services, a cardiac comprehensive care centre, infectious disease unit, acute imaging, operating theatres and expansion of ambulatory care services and centralised education, training and research space.

Table A.6: Major projects and programs for health (cont)

Project Name	Estimated Total Cost (unless otherwise stated)	Description
Wyong Hospital Redevelopment Stage 1	\$200.0 million	This project will include a new Emergency Department and expansion of inpatient services as well as new facilities for maternity, intensive care, paediatric, rehabilitation and ambulatory services and additional operating theatres.
Achieving Integrated Digital Patient Records	\$236.2 million	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.
Whole of System Digital Platform	\$286.3 million	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 health care and next-generation video conferencing for clinicians and patients.
HealthOne Strategy	\$100.0 million	20 HealthOne sites have been announced under the Strategy. The services provided through each HealthOne are designed to meet the needs of the local community. The investment aims to improve health outcomes by providing access to primary health care services closer to home. Services may include Commonwealth Government-funded general practice and state-funded primary and community health care services, and services provided by other government agencies and non-government organisations.
Multipurpose Services (MPS) Strategy	\$300.0 million	The program will continue to invest in the MPS strategy and deliver integrated health services to better meet the needs of rural and remote communities. In 2018-19, construction has commenced at Molong, Tumbarumba, Coolah, Rylstone, Barham, Culcairn, Bonalbo, and planning continues for construction at Cobar, Harden, Braidwood, Yass and Murrurundi.

Table A.6: Major projects and programs for health (cont)

Project Name	Estimated Total Cost (unless otherwise stated)	Description
Rural Ambulance Infrastructure Reconfiguration	\$122.1 million	This project will reconfigure rural and regional ambulance infrastructure to respond to service demand. A total of 23 new, rebuilt and updated NSW Ambulance stations have been announced by the NSW Government. Construction is in progress at stations at Bathurst, Bay and Basin, Berry, Griffith, Hamlyn Terrace/Wyong, Molong and Toukley. Planning is under way at Coffs Harbour, Cootamundra, Wauchope, Bungendore, Yass, Pottsville, Cowra, Grenfell, Birmingham Gardens, Goulburn and Rutherford.
Sydney Ambulance Metropolitan Infrastructure Strategy	\$150.0 million	The Strategy is building large new superstations in key locations in Sydney. Construction of superstations are in progress at Caringbah and Haberfield. Paramedic Response Points networked to the superstations are also under construction at Bonnyrigg, Wiley Park and Quakers Hill.
Asset Refurbishment / Replacement Strategy – State-wide	\$500.0 million	This 10-year strategy which commenced in 2014-15 augments the maintenance activities undertaken by Local Health Districts for assets such as major plant (e.g. air conditioning, lifts and other engineering infrastructure).

(a) Estimated Total Costs have been updated since the 2017-18 Budget: Coffs Harbour – additional funding in the 2018-19 Budget; Westmead - inclusion of the NSW Infectious Diseases Unit; and Hornsby, Maitland, Wagga Wagga and Tweed – merging of phases of the project.

Education and Training

Education

NSW has the largest public school system in Australia. The Premier's commitment to improve education results is a key priority. This includes innovative approaches to the delivery of school infrastructure to increase capacity within the NSW education system and to deliver fit-for-purpose assets that support modern teaching practice.

The Government holds approximately \$33.0 billion in land and buildings, including over 2,200 schools accommodated in over 21,000 buildings across the State.

NSW government schools are experiencing a once-in-a-generation enrolment growth. The School Asset Strategic Plan is the Government's blueprint for managing that growth.

The NSW Government is investing \$6.0 billion in major school infrastructure over the next four years. In addition, an investment of \$500.0 million will deliver new, sustainable air cooling systems across the government school system (over five years). This will include both reverse cycle air-conditioning and mechanical ventilation to improve temperature, humidity and indoor air quality in government schools currently without air-conditioning.

In August 2017, School Infrastructure NSW (SINSW) was established as a centre of excellence for the planning, design, delivery and maintenance of school facilities in New South Wales, delivering once-in-a-generation school buildings, major upgrades and maintenance strategies. This is part of a multi-billion dollar government investment to meet the needs of future schooling as a result of changes to population growth, new ways of teaching and learning, and social change.

SINSW also oversees the implementation of the School Assets Strategic Plan. Under the plan, SINSW will:

- ensure that our schools can flexibly accommodate increasing student numbers with school expansions and sustainable modular buildings
- involve the community in new approaches to planning. This will be a collaborative approach that includes the community to determine how best to approach planning for school infrastructure
- ensure our schools provide a healthy and environmentally sustainable environment, and are fit-for-purpose
- ensure that learning spaces support Futures Learning and are flexible and adaptable to support modern teaching practice
- investigate how we can better harness innovative technologies and equip our education facilities for the digital age
- explore opportunities to work with the private sector to ensure there are innovative ways new schools are delivered
- work with external stakeholders to promote the integration of school and community facilities in master planning processes, and facilitate joint and shared use opportunities.

The following major projects in Table A.7 will contribute to the delivery of Government priorities.

Table A.7: Major projects for education

Project Name	Estimated Total Cost (unless otherwise stated)	Description
Major school infrastructure new works commencing in 2018-19	n.a.	Around 40 major new works projects commencing in 2018-19 to meet demand growth and opportunities for asset renewal.
Major school infrastructure works in progress	n.a.	Over 110 existing major school infrastructure works in progress across the State to improve and maintain school facilities and/or meet growth in student numbers.
Cooling for Schools	\$500.0 million	Staged investment over 5 years to sustainably improve the indoor environment quality of learning spaces and libraries in NSW Government schools. This includes reverse cycle air-conditioning and mechanical ventilation to improve temperature, humidity and indoor air quality.
Planning for Future New Schools	\$60.0 million	Planning for over 20 new and upgraded schools in NSW, enabling the department to meet the projected enrolment demand to 2031.

Table A.7: Major projects for education (cont)

Project Name	Estimated Total Cost (unless otherwise stated)	Description
Land acquisition, school IT infrastructure and minor works	\$1.4 billion	Provision for land acquisition, computers and other IT infrastructure across schools, minor capital works and equipment.
Share our Space Program	\$30.0 million	This funding will support the continued success of the program, which provides community access to playgrounds, ovals and sports courts across 80 public schools.

Training

As the State's publicly-owned vocational education and training provider, TAFE NSW needs to be strong, innovative, flexible and responsive to the community and industry. It is the leading skills provider in the State; delivering relevant, high-quality, practical and creative training to grow the NSW economy through One TAFE NSW.

TAFE NSW is developing a 20-year Infrastructure Strategy that will align the asset portfolio to our future training needs and ensure consistent delivery across New South Wales through the strategic location and standardised design of the Interconnected Training Network. The Interconnected Training Network will redefine the way teaching, learning and community interaction with TAFE NSW occurs. It will provide students the option to study when, where and how they want and will ensure TAFE NSW's high-quality training services are accessible and available across metropolitan, rural and regional areas.

Table A.8: Major projects for training

Project Name	Estimated Total Cost (unless otherwise stated)	Description
TAFE – Major Works starting in 2018-19	\$31.6 million (2018-19)	Supporting the approved Connected Learning Centre Program through the development of Mobile Training Units. Consolidating training delivery at Meadowbank to support the development of an Education and Training Precinct.
Continuing Major TAFE Projects	\$213.3 million	New builds, building upgrades and additions at various TAFE NSW locations. Key projects include a new Student Management System, and the continuing development of Connected Learning Centres across the state.

Energy

Energy markets are transforming, and rapid advances are being made in energy generation, storage and efficiency technologies. The Government is anticipating and responding to this transformation in planning and policy for the State's energy infrastructure.

The NSW Government is supporting new investment in electricity generation through the following:

- Identifying three new potential energy zones in the New England, Central-West and South-West regions. Energy zones signal optimal locations for new investment to the market.
- Partnering with WaterNSW to invite proposals from the private sector to generate energy using the State's water assets. Projects could include pumped hydro, hydro generation, and floating solar.

The *NSW Renewable Energy Action Plan (REAP)* and the Climate Change Fund are also facilitating new generation and storage infrastructure. Actions under the REAP have helped double the share of renewables in the NSW energy mix. This growth is set to continue with around 15,000 megawatts of new large-scale renewable energy projects across the State.

The Government is developing the State's energy resources responsibly, including through the implementation of the *NSW Gas Plan* and the *Strategic Release Framework for Coal and Petroleum Exploration*.

Water

Reliable and affordable water is vital for households, businesses and industries and underpins the economic prosperity of metropolitan areas and regional towns and centres. The State's water infrastructure must ensure access to water in the face of growing populations, the demands for a greener environment and the challenges placed by extreme weather conditions that can disrupt the stable supply of water.

The Government has established the Safe and Secure Water Program, a \$1.0 billion initiative to respond to regional water challenges. The program will co-fund eligible water and sewerage projects that deliver economic growth in regional New South Wales and ensure that regional communities have a secure, sustainable and affordable water supply.

A NSW Water Statement will be developed to bring together water resource plans and regional water strategies across the State, including planning to meet the future challenges of climate variability and population changes. Sydney Water will also prepare a 20-year Strategic Capital Plan, in partnership with WaterNSW, to improve asset planning and maintenance activities.

Table A.9: Major projects and programs for water

Project Name	Estimated Total Cost (unless otherwise stated)	Description
Broken Hill Water Supply	\$419.6 million ^(a)	Long-term solutions to the water needs of Broken Hill and surrounding districts, scheduled for completion by late 2018.
Riverstone Wastewater Treatment Plant Upgrade (Stage1)	\$117.1 million	Upgrade 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.
Sydney Water Customer Experience Program (CxP)	\$202.6 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.
Quakers Hill / St Marys Wastewater Treatment Plant Improvement Program	\$300.0 million	Program to improve performance and reliability of the Quakers Hill and St Marys waste water treatment plants.
Growth Centre Works – North West Priority Growth Area	\$327.2 million	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 other minor greenfield and infill growth areas.
South West Priority Growth Area	\$402.7 million	

(a) The Broken Hill Pipeline project is forecast to cost \$467.0 million. The capital expenditure figure of \$419.6 million excludes capital spending on water and electricity assets to be transferred to Essential Energy which, for accounting purposes, is treated as operating expenditure by WaterNSW.

Justice

The Justice Cluster is preparing a comprehensive 20-year Infrastructure Strategy following recommendations in the *NSW State Infrastructure Strategy 2018-2038*.

The Government is committed to accommodating the prisoner population by delivering long-term capacity for the State's correctional facilities with a significant capital injection to ensure infrastructure meets future needs.

The Government also continues to invest in Police facilities and technology to protect communities across the State.

The following major projects currently underway will contribute to delivering these strategic priorities:

Table A.10: Major projects and programs 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 increase prison beds across the network through new prisons, prison expansions and conversions.
Grafton Correctional Centre	\$778.8 million	Establishment of a new 1,700 bed facility at Grafton in Northern NSW.
Multipurpose Police Station Program	\$98.9 million	To redevelop police stations at Cessnock, Broken Hill, Inverell, Parramatta, and Hurstville, and land acquisition and planning for Port Macquarie Police Station.
Future Light Helicopter Program	\$47.8 million	To replace three Police helicopters – PolAir 1, 3 and 4.
Regional Small Police Station Program	\$15.9 million	To redevelop police stations in regional locations across New South Wales including Adelong, Braidwood, Tea Gardens, South West Rocks, Tullamore, Collarenebri and Bonalbo.

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 economy.¹

The following major projects in Table A.11 are currently underway or expected to commence within the next five years and will contribute to delivering the Government's priorities:

¹ 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>

Table A.11: Major projects for arts and culture

Project Name	Estimated Total Cost (unless otherwise stated)	Description
Sydney Modern Project – Expansion of the Art Gallery	\$344.3 million ^(a)	The Sydney Modern project will increase the gallery space and enhance the local and international reputation of the Art Gallery of New South Wales. The NSW Government contribution is \$244.3 million.
Walsh Bay Arts Precinct	\$245.1 million	Construction of new and upgraded production, studio, rehearsal and performance venues to support performing arts groups.
Sydney Opera House Stage 1 Renewal	\$202.0 million	The Sydney Opera House Renewal project includes upgrades to the Concert Hall, entry points and foyers and new creative learning and function centres.
New Powerhouse Museum for Parramatta and Creative Industries Precinct, Ultimo (planning)	n.a.	Relocate the Powerhouse Museum to Parramatta, expand storage at the Museum Discovery Centre and plan a creative industries precinct in Ultimo. The NSW Government contribution is \$645.0 million.
Australian Museum Stage 1 Redevelopment	\$50.5 million	To deliver a new touring exhibition hall, education and visitor facilities for the Australian Museum.

(a) Sydney Modern estimated total cost includes private contributions.

Sporting facilities

To help ensure New South Wales has the right facilities to support participation in sport and active recreation, a Sport Infrastructure Strategy is being developed to guide investment and management decisions that address the needs of both fans and sporting teams.

The new Western Sydney Stadium will be the first of a network of contemporary venues to ensure New South Wales maintains a competitive edge in the national and international sporting and event market. Construction of the stadium is under way and on target to be completed in the first half of 2019.

The Government has also announced a full redevelopment of Sydney Football Stadium at Moore Park and a refurbishment of Stadium Australia at Olympic Park. The redevelopment of Sydney Football Stadium will commence in late 2018 and is expected to be completed by March 2022. The refurbishment of Stadium Australia will commence in late 2019 with expected completion by mid-2021. Both projects will provide for an improved match day experience for fans and further assist in attracting major sporting and other cultural events to New South Wales.

Local communities will also benefit from a Greater Sydney Sports Facilities Fund and a Regional Sports Facilities Fund to improve the quality and quantity of sports infrastructure across the State.

The following major projects in Table A.12 are currently underway, or expected to commence within the next two years, and contribute to the Government's priorities:

Table A.12: Major projects for sporting facilities

Project Name	Estimated Total Cost (unless otherwise stated)	Description
Western Sydney Stadium	\$360.0 million	Construction of a new stadium and associated works at Parramatta.
Sydney Football Stadium	\$729.0 million	Construction of a new stadium at Moore Park.

Social housing

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

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

Future Direction's \$22.0 billion Communities Plus program is projected to deliver 23,000 new and replacement social housing dwellings and more than 500 affordable dwellings in integrated communities with more than 40,000 private dwellings.

Major projects announced to date include Riverwood, Waterloo, Ivanhoe (Macquarie Park), Telopea, Arncliffe, Redfern, and Villawood, as well as smaller scale developments in metropolitan Sydney and regional areas.

The Social and Affordable Housing Fund (SAHF) is an innovative approach to commissioning social and affordable housing. Phase 1 of SAHF is underway to deliver access to 2,200 additional social and affordable dwellings. Contracts for Phase 2 are expected by December 2018 and are targeting delivery of 1,200 dwellings.

In addition, at April 2018, the Millers Point sales program has delivered 1,192 new and better homes completed or under construction in areas of high demand.

The following major projects in Table A.13 are currently underway to contribute to delivering the Government's strategic priorities:

Table A.13: Major projects for social housing

Project Name	Estimated Total Cost (unless otherwise stated)	Description
Public Housing Capital Program	\$533.0 million (2018-19)	Upgrades to existing dwellings and new public housing.
Ivanhoe (Macquarie Park)	n.a. ^(a)	Redevelopment of the Ivanhoe Estate (259 existing dwellings) into an integrated community of social (950), private, and affordable housing, offering better access to transport and employment, improved community facilities and open spaces, as well as wrap around services for social housing tenants.

(a) Social housing component funded through a development agreement.

Digital connectivity and technology

The NSW Digital Government 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 the State's capital and recurrent ICT projects.

The *NSW State Infrastructure Strategy 2018-2038* considers future digital trends and connectivity infrastructure requirements that New South Wales will need over the next 20 years.

The following major projects in Table A.14 currently underway or expected to commence within the next five years, will contribute to delivering the Government's objective of improving state-wide connectivity and realising the benefits of technology.

Table A.14: Major ICT and digital projects

Project Name	Estimated Total Cost (unless otherwise stated)	Description
Health: Whole of System Digital Platform	\$286.3 million	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 health care and next-generation video conferencing for clinicians and patients.
Health: Achieving Integrated Digital Patient Records	\$236.2 million	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.
Finance: Critical Communications Enhancement Program	\$497.1 million	Investment 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 for the North Coast and Greater Metropolitan Area, refreshing the existing Government Radio Network and addressing agencies critical priority sites.

Table A.14: Major ICT and digital projects (cont)

Project Name	Estimated Total Cost (unless otherwise stated)	Description
Sydney Water Customer Experience Program (CxP)	\$202.6 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.