ACT GOVERNMENT INFRASTRUCTURE PLAN





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FOREWORD

In 2008, the Government committed to releasing regularly updated, rolling ten-year infrastructure plans. The first of these plans was released in 2010 and developed in consultation with industry and the community sector.

I am pleased to present the ACT Government Infrastructure Plan: 2011–2021. This document builds on its first iteration and has again been informed by community and industry views. It captures this Government s commitment to ensuring that the Territory continues to mature as a world-leading city.

Over the past decade our community has demonstrated resilience in responding to adversity, working together to deliver important reforms, and growing as never before. As Canberra approaches its second century, it is important to ensure that our city s characteristic charm is maintained while the needs of our community are met. This means working smarter to deliver more.

In the 2011-12 Budget, the Government announced a record capital program that provides \$884.9 million for new works over the next four years. This includes funding to support the release of an additional 18,500 residential sites to improve housing affordability, an allocation to radically transform freight travel in the region through the development of the Majura Parkway and significant investments in education, health and community infrastructure.

This Government recognises its responsibility to look beyond the short term. It has restructured the ACT Public Service to ensure it is best placed to respond to emerging challenges and demands. The Infrastructure Plan reflects this considered approach to planning and delivering for the community which acknowledges that:

- in a resource constrained environment, major government infrastructure investment decisions have significant and ongoing impacts on the community and should provide good value for money over the longer term;
- there is a need to provide affordable and appropriate housing options to accommodate the needs of a growing number of Canberrans, while maintaining and enhancing the character of the city;
- it is essential to invest proactively in health services to meet the changing needs of the population;
- it is incumbent upon all responsible governments to respond to the effects of climate change through adaptation and mitigation strategies; and
- town centres and villages are core elements of our local communities and require sustained effort to rejuvenate and maintain their amenity.

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This Plan has built on the Infrastructure Framework outlined in 2010. It explores options for closer alignment between longer term infrastructure prioritisation and existing processes. It also discusses opportunities and mechanisms to better integrate climate change considerations into infrastructure development and maintenance.

This Plan is part of a program of ongoing work to improve and sustain the prosperity and productivity of this great city as we approach our second century. I commend the ACT Government Infrastructure Plan: 2011–2021 to you.

Laty Callagher

Katy Gallagher Chief Minister

CONTEXT

Governments have an important role to play in shaping the physical and organisational structures that underpin the social, economic and environmental prosperity of communities. This infrastructure takes a diverse range of forms from roads, bridges and hospitals, to arts centres and fibre optic networks.

As Canberra's centenary approaches, it is appropriate to reflect on and strengthen Government infrastructure planning and prioritisation processes. This will ensure that the Territory is best placed to meet the future needs of the community.

Governments across Australia acknowledge that planning for and delivering infrastructure that meets contemporary needs requires a dynamic and strategic approach. Such an approach means that major infrastructure investment decisions need to balance considerations around:

- the efficient use of existing assets;
- delivering new investment; and
- responding to the changing economic, environmental and social context at the macro and local levels.

The Council of Australian Governments (COAG) agreed that the Commonwealth, States and Territories would develop robust long-term infrastructure plans by 2012.¹

This approach moves away from a model that focuses on projects in isolation, to one that draws a line of sight between Government policy priorities and the infrastructure required to deliver improved outcomes in the community.

It was developed to support continuous improvement in the strategic planning systems of our cities, and to build and share knowledge of best practice planning approaches across government, industry and the nation.²

The ACT Government Infrastructure Plan captures a broader program of work to ensure that Canberra is globally competitive, productive, sustainable, socially inclusive, and well placed to respond to growth and meet future challenges.

This plan explores opportunities to strengthen infrastructure prioritisation processes in a wholeof-government context over the longer term and consequently optimise community benefit from the Territory's growing and changing asset base.

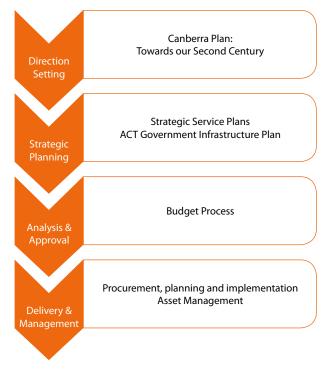
¹ Infrastructure Australia, 'Getting the fundamentals right for Australia's infrastructure priorities', June 2010, p. 62

² Infrastructure Australia, 'Our Cities—building a productive, sustainable and liveable future', 2010, p. 61

THE ACT GOVERNMENT INFRASTRUCTURE FRAMEWORK

In *An Infrastructure Plan for the ACT*³, the Government outlined a framework to drive more detailed effort to identify major priorities for the coming decade and beyond. The first ACT Government Infrastructure Plan was developed within this framework and released in 2010. It established a sound foundation upon which to develop greater depth and maturity in the Territory's strategic infrastructure planning and prioritisation processes.

Figure 1: The ACT Government Infrastructure Framework



Source: ACT Government, 2010 Infrastructure Plan

The ACT Government Infrastructure Plan: 2011–2021 seeks to capitalise on opportunities identified through feedback provided last year to strengthen this important document. It also engages with the significant program of work that has been completed over the last year, including:

- completion of the Canberra 2030: Time to Talk community engagement process⁴;
- commencement of reforms in response to the comprehensive ACT Public Service Review conducted by Dr Allan Hawke AC⁵; and
- convening of two Community and Industry Infrastructure Roundtables⁶.

This approach is designed to ensure that major infrastructure investment decisions contribute to a cohesive vision for societal progress. In other words, it is a mechanism that integrates individual projects into a whole-of-government plan. These priorities will be refined as needed and, where appropriate, funded through the Budget process. Such an approach provides opportunities to:

- assess gaps in the Government's infrastructure profile to support the range and quality of services it provides;
- deliver innovative and citizen-centred services to maximise community benefits from infrastructure;
- identify strategies for adaptive reuse and management of the Territory's existing infrastructure; and
- anticipate and adapt to policy challenges such as climate change using emerging technologies.

The ACT Government Infrastructure Plan draws on this work to engage with key stakeholders as part of infrastructure planning. Applying the strategic framework outlined above, this document also provides an indication of progress in the area of infrastructure delivery since last year.

The Infrastructure Plan is a strategic planning document. It draws together infrastructure priorities across government that are needed to support important services and meet community needs and expectations. This holistic approach to infrastructure prioritisation assists in making better informed decisions on the timing and scope of major projects. The Plan interacts with, but does not replace, annual budget decisions to fund specific projects.

FUTURE DIRECTIONS

Future directions include:

- implementing strategic asset management and service planning across government agencies;
- exploring strategic opportunities across all agencies to support innovation and quality infrastructure design;
- consulting on the need for a climate change vulnerability assessment framework for ACT Government infrastructure;
- strengthening strategic infrastructure planning by developing closer links with Government prioritisation processes; and
- engaging in continuous improvement of the planning and delivery of new infrastructure investment in the Territory.



³ The report 'An Infrastructure Plan for the ACT' can be found at: http://www.cmd.act. gov.au/__data/assets/pdf_file/0010/119728/infrastructure_plan.pdf

⁴ The complete Outcomes Report from the Canberra 2030: Time to Talk consultation can be found at: http://www.canberra2030.org.au

⁵ The complete ACT Public Service Review can be found at: http://www.actpsreview.act.gov.au/

⁶ Further information on the Community and Industry Infrastructure Roundtables held to inform this iteration of the Infrastructure Plan is available at: http://www.cmd.act.gov.au/policystrategic/infrastructure

DRIVERS OF INFRASTRUCTURE DEMAND

Drivers of demand present opportunities and challenges in the area of infrastructure prioritisation and development. In some cases, the feasibility of particular projects is driven by growth in demand and population. Alternatively, existing infrastructure is also stressed by demand growth and emerging issues such as climate change.

Over the next ten years, infrastructure demand will be driven by the:

- changing demographic profile of the Territory;
- geographic location of services;
- role of the ACT in a growing region;
- capacity to maintain vital infrastructure as it ages;
- economic structure and strategy adopted by the Territory in relation to capital investment; and
- effects of climate change.



RESPONDING TO CHANGING DEMOGRAPHICS

Projections of the level, characteristics and location of the ACT's future population are fundamental to quality policy development and informed decision making. Demographic analysis and population projections help inform the Government of the changing nature of the community's needs and help agencies plan for and deliver infrastructure and services to sustain a productive and prosperous community.

POPULATION GROWTH

By 2021, Canberra's population is estimated to reach 414,367⁷, according to ACT Government projections.

Population growth can place pressure on, drive demand for, and open up transformational investment opportunities in infrastructure. A growing population also assists in addressing the economic implications of skilled labour shortages and workforce demand reflective of a growing and ageing population. Increasing economies of scale arising from a growing population also provide opportunities to achieve even more efficient government investment in this area. This growth also increases the utility of infrastructure.

AN AGEING POPULATION

Over the next several decades, population ageing is projected to have significant implications for Australia, including for health, labour force participation, housing and demand for skilled labour.⁸

An ageing population will have a range of economic, social and fiscal implications for the ACT, including on the delivery of services and infrastructure.

Australian Bureau of Statistics data show that the current population profile in the ACT is younger than the national average with a median age of 34.7 years, compared to 36.9 years nationally. However, the median age of the ACT population has been steadily growing over the last decade and is projected to continue to do so.

Over the coming decade, Canberra's population is expected to age significantly. The cohort aged 65 years and over is projected to increase from current levels of just over 10 per cent of the population to more than 14 per cent of the population in 2021. This population ageing is primarily the result of larger baby boomer cohorts born between 1946 and 1965 shifting into older age groups, with increased prospects for living longer.

GEOGRAPHIC PLACEMENT

The expansion of the city is likely to fuel greater demand for services and supporting infrastructure in new urban areas. Additionally, urban infill and increased population density in existing areas are likely to increase pressure on community infrastructure. The geographic location of these trends is an important consideration in determining infrastructure and policy priorities.

For example, investment decisions about the location of new schools, health services and community facilities are informed by evidence and analysis of need within a particular area.

Over the next decade, the Molonglo and North Canberra Districts are projected to have the youngest populations in the Territory, while the populations of Belconnen, Weston Creek and Tuggeranong are projected to age most rapidly. Interestingly, the Gungahlin District is projected to have a significant proportion of both the youngest and oldest cohorts in the Territory.

The Government is investing in infrastructure to meet the emerging needs of these areas. It has allocated funding for the construction of a primary school in Bonner, and an early childhood school in Franklin, and to expand the Majura and Macgregor Primary Schools. Cohorts aged between 0 and 14 years in these areas are projected to grow significantly.

Similarly, the Government has invested in a range of initiatives to support ageing in place and the development of housing options, such as the Ngunnawal Aged Care Land Release, funded through the 2011-12 Budget. It has also invested in the expansion of healthcare centres across the Territory in areas of priority such as Tuggeranong to cater for growing demand for these services and provide treatment alternatives for older Canberrans.



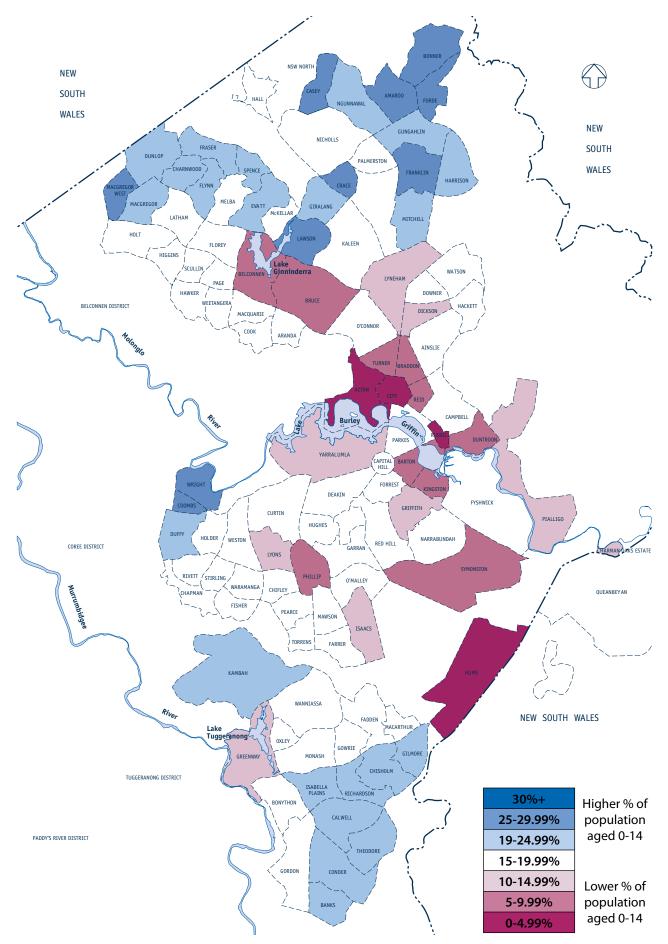
⁷ ACT Population Projections: 2009–2059 can be found at:



http://www.cmd.act.gov.au/policystrategic/actstats/projections

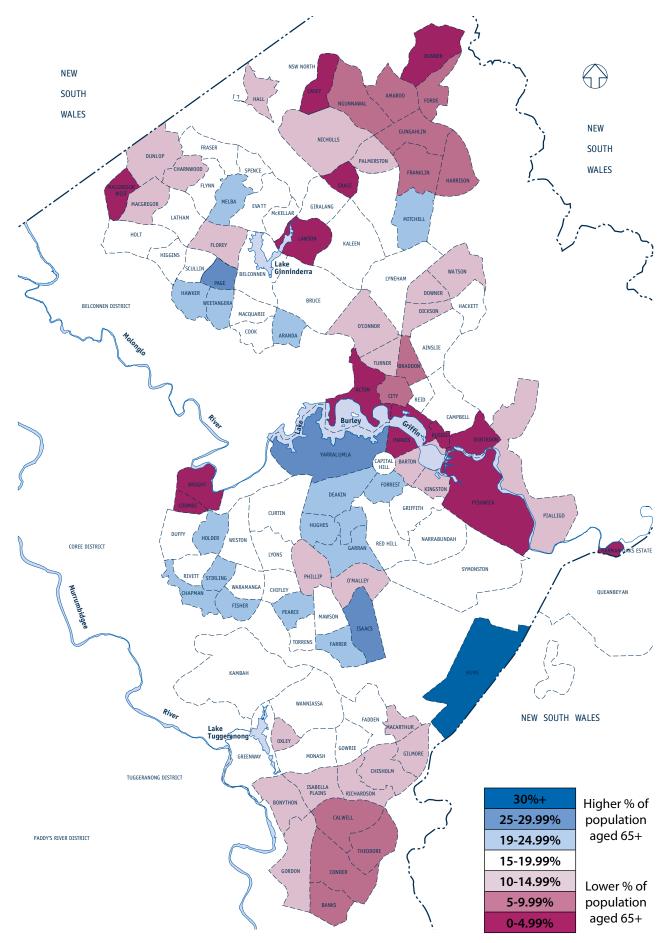
⁸ Commonwealth of Australia, Australia to 2050: Future Challenges – Intergenerational Report 2010, January 2010





Source: ACT Government, ACT Population Projections for Suburbs and Districts: 2007 to 2019, www.cmd.act.gov.au/policystrategic/actstats

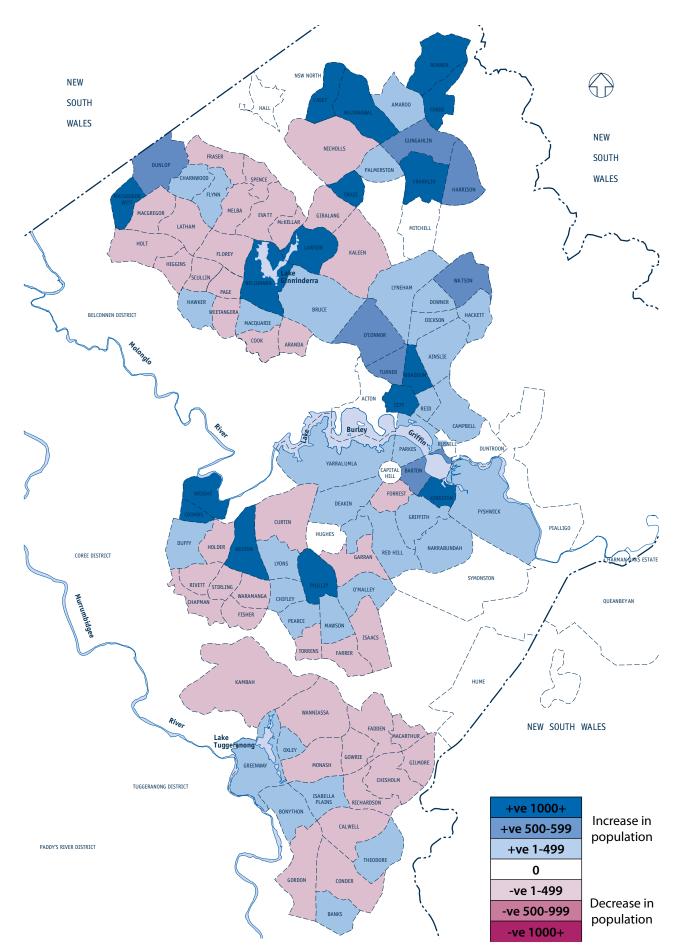




Source: ACT Government, ACT Population Projections for Suburbs and Districts: 2007 to 2019, www.cmd.act.gov.au/policystrategic/actstats



Figure 4: ACT Population Change by Suburb (2009-2019)



⁹ ABS, Regional Population Growth, Australia (cat 3218.0), www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/3218.02009-10?OpenDocument and ACT Government, ACT Population Projections for Suburbs and Districts: 2007 to 2019, www.cmd.act.gov.au/policystrategic/actstats

THE GROWING AUSTRALIAN CAPITAL REGION

The circumstances of the ACT are unique among Australia's jurisdictions. It is:

- the seat of national government;
- a growing city-state servicing its own community; and
- the economic and service centre for the Australian Capital Region.

These distinctive features present strategic planning opportunities and challenges for the ACT Government.

The ACT is a major service and employment centre for the people of southern New South Wales (NSW). It is estimated that over 20,000 people living in the surrounding region travel to work in the Territory each day. Bordering NSW residents also access a variety of public and private services located in the ACT. These include schools and educational facilities, hospital and medical treatments, entertainment and leisure, and air travel.

In the coming decade, the south-eastern region of NSW is projected to grow and age significantly. NSW Government population projections indicate much of this growth is likely to occur in the areas closest to the ACT, including Queanbeyan, Bungendore and Yass.

Recognising this growing demand, the ACT is actively engaged in strategic planning across the region through a variety of mechanisms. The Government also has arrangements in place to compensate for cross-border service usage and is working to develop more detailed data in this area to plan for and manage these service and infrastructure demands.

Strengthening links between the ACT and nearby NSW offers opportunities to generate economic and social gains for both the region and the Territory. Harnessing the role of the Territory as a regional hub is an acknowledgment of the significance of:

- connectivity within and across the region that stretches beyond jurisdictional boundaries;
- transport planning, which is a major focus of the ACT Government's submissions to Infrastructure Australia prioritisation processes; and
- the Canberra International Airport as a major regional gateway and an important element of the regional economy.

TRANSFORMING REGIONAL MOVEMENT

The development of a dual carriage parkway between the Monaro and Federal Highways will radically transform the movement of freight along the northsouth regional corridor. It will also address the significant bottleneck that currently exists along the Canberra-Sydney freight corridor.

The Majura Parkway project is an infrastructure priority for the ACT Government. It has been designed to improve commuter traffic flows and safety, with project specifications developed to ensure cost-effective and innovative delivery. As part of the 2011-12 ACT Budget, \$144 million was allocated to this project. The Commonwealth has agreed to provide matching funding.

MAINTAINING THE TERRITORY'S INFRASTRUCTURE

Improving the utilisation of existing assets and providing further opportunities for multiple uses in the future is an important component of infrastructure planning. As the Territory's asset base grows and ages, so do maintenance costs.

The ACT Government's *Strategic Asset Management Framework* guides the acquisition, use and disposal of infrastructure and public assets. The Framework has been developed to enable agencies to meet their service delivery objectives efficiently and effectively. It also assists personnel involved in the planning, management and delivery of services that are asset dependent. The Framework is currently being rolled out.

Asset management covers a range of areas including physical and financial reporting, policies on use and performance, planning, acquisition and financing, business case requirements for funding, and ongoing accountabilities. The Framework seeks to develop stronger synergies between these considerations and the Government service delivery profile across the ACT.

Developing strategic asset management plans is a core component of the Framework. These plans are prepared by agencies and reviewed annually to establish the optimum form of the assets required to deliver efficient, effective and appropriate services.

A PRODUCTIVE, PROSPEROUS AND DIVERSE ECONOMY

Capital Development: Towards Our Second Century sets out the Government's strategy for developing 'a strong and resilient economy and a sustainable, fair and prosperous future for all Canberrans'¹⁰. This economic strategy focuses on:

- a considered approach to fiscal management;
- strategic infrastructure investment;
- streamlining and implementing effective and efficient regulatory regimes;



¹⁰ Capital Development: Towards Our Second Century can be found at: http://www.cmd. act.gov.au/__data/assets/pdf_file/0005/119723/capital-development.pdf

- ensuring availability of affordable housing and appropriate land supply to meet demand; and
- facilitating skills development and retention in areas of shortages.

Strong economies are founded on effective infrastructure. Transport links allow the movement of resources. Communications infrastructure supports the spread of information. Water and electricity networks provide basic services for businesses and households. Public infrastructure such as hospitals, education, recreation and cultural facilities, support improved health services, enhance learning opportunities and build sustainable communities.

In the main, the contemporary challenge for government infrastructure investment is related to delivery in a supply constrained environment. However, it must also be acknowledged that budget capacity is required for capital development. This underscores the need to maximise both the medium term and longer term benefits of infrastructure investment decisions.

The ACT has a strong and dynamic economy, buoyed by a history of productivity improvements and very high levels of labour force participation. Over the decade to 2010, the ACT's per capita Gross State Product has consistently been above Australia's per capita Gross Domestic Product. Maintaining this growth is a key priority to mitigate the economic impacts of an ageing population.

Infrastructure investment continues to be an important way of increasing the ACT's productive capacity and the material wellbeing of the community. This investment increases human capital and leverages private investment in technological innovation and existing infrastructure to derive enhanced economic benefits and productivity outcomes.

Infrastructure planning must also embrace economic change. As the population changes in composition, governments need to develop proactive strategies to support ongoing participation in the economy, sustainable development and productivity growth. An important part of this work is ensuring expenditure and revenue settings are appropriate to facilitate these conditions. To this end, the ACT Government is currently undertaking a review of its taxation settings. This review is due to report in the second half of 2011.

ADDRESSING CLIMATE CHANGE

Responding to climate change is a key consideration in ensuring a sustainable future for the Territory. In particular, planning for Canberra's future infrastructure requirements will be influenced and informed by the need to adapt to the unavoidable effects of climate change.

The Government has also set ambitious targets for reducing the ACT's net greenhouse gas emissions, including that Canberra will have zero net carbon emissions by 2060. To meet these targets it has released a draft energy policy and is developing a second climate change action plan.

These climate change policies are being integrated into all of the ACT's key policies. For example, the current evaluation of the ACT Planning Strategy is also reviewing how our planning systems can best adapt our city to the impacts of climate change. This builds on a range of work undertaken as part of the Sustainable Future program.¹¹

A risk-based approach to asset management should also account for the effects of increased extreme heat, bushfire and storm flooding and decreased water supply on the maintenance of public infrastructure.

Responsible asset management and infrastructure planning mandates an approach which identifies, responds to and where possible mitigates these risks proactively. As the Government works towards its carbon emission reduction targets, it must also develop a framework to better integrate climate change adaptation considerations into existing asset and project management processes.

CLIMATE CHANGE VULNERABILITY ASSESSMENT FRAMEWORK FOR INFRASTRUCTURE

Infrastructure design has always been shaped by climatic conditions. While there is uncertainty about Canberra's climatic conditions over the lifetimes of infrastructure projects, planning must also anticipate how these considerations will shape project development and specifications.

Given the difficulties of predicting future climatic conditions, it will be important to design infrastructure so that it is robust enough to withstand a range of potential conditions, particularly extreme weather events. Another approach to dealing with this uncertainty is to identify thresholds and discontinuities in design approaches needed to deal with increasingly demanding climatic conditions. In this way, the costs of climate change adaptation can be identified in the absence of certainty about future climatic conditions.

Assessing the effects of changing climatic conditions on existing infrastructure can assist in scheduling maintenance and replacement of infrastructure due to hastened wear, or likely failure during extreme events.

To this end, the Government will consider the merits of developing a climate change vulnerability assessment framework for ACT Government infrastructure. To be effective, any such framework must complement rather than duplicate existing asset management processes. The Government will undertake further consultation with industry and the community over the coming year as part of this work.

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¹¹ Further information on the Sustainable Future program is available at: http://www. actpla.act.gov.au/topics/significant_projects/planning_studies/sustainable_future



PLANNING FOR THE FUTURE

Decision making on infrastructure development has far-reaching implications that are particularly relevant for governments. Decisions about the planning, prioritisation, staging and development of such works have immediate and long-term social, economic and environmental impacts.

Governments across Australia are developing longer term infrastructure plans to establish a cohesive understanding of the range of infrastructure required to continue to deliver core services, while responding to growing and changing community needs.

The ACT Government Infrastructure Plan has been developed to provide a better understanding of the Government's infrastructure priorities in the future. Appropriately, these priorities are dynamic and refined through the Budget process. As a result the priorities in this plan are indicative and provide an opportunity to engage further with the community and industry in the collaborative planning and development of the city.

The Infrastructure Plan provides an overall indication of the major works that support the delivery of strategic outcomes across government rather than at the individual project level. This has been achieved by mapping policy objectives and priorities across government functions to the infrastructure that is likely to be necessary to deliver these goals over the next two, five and ten years. These infrastructure priorities have also been based on:

- long-term trend analyses used to inform future infrastructure priorities and internal service planning processes;
- the current state of the infrastructure asset base; and
- key areas of demand, external factors that may influence this demand, and service demand projections.

The strategic thinking that the Infrastructure Plan is designed to strengthen is demonstrated in Figure 5. It outlines selected infrastructure projects designed to help deliver the Government's vision for Canberra over the coming decade and beyond.





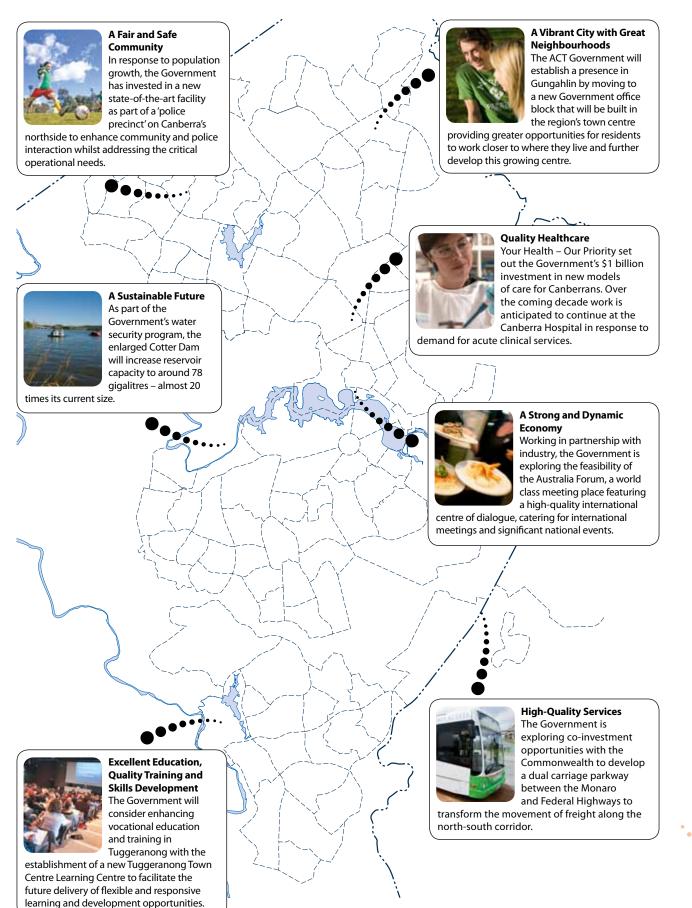


STRATEGIC INFRASTRUCTURE DIRECTIONS

The Canberra Plan: Towards Our Second Century articulates the Government's vision of societal progress. It identifies seven long-term Government priorities to deliver:

- a vibrant city with great neighbourhoods;
- high-quality services;
- a fair and safe community;
- quality health care;
- excellent education, quality teaching and skills development;
- a strong, dynamic economy; and
- a sustainable future.

Translating these high-level priorities into improved outcomes requires more focused and strategic thinking to establish policy directions and deliver results. A key component in delivering these results is having the right infrastructure. Following is a discussion on the relationship between sector-level strategic priorities across government and infrastructure options.



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SOCILAL A VIBRANT CITY WITH **GREAT NEIGHBOURHOODS** CULTURE PARTICIPATE QUALITY CITY COMMUNITY OMMUNITY ASSETS HIGH-QUALITY CIT FFICIENT CITYSERVICES EFFICIENT OF STRUCTURE LIVE BENEFIT COMMUNITY IVE AFAIR & PARTICIPATE LIFE SAFEACT RESPECTFUL LIFE COMMUNITY ACTIVE ACCESS WELLBEING JOYA HEALTHY ACTGOOD PEOPLE ENJOY COMMUNITY WORKFORCE NEEDS QUALITY OPPORTUNITIES EDUCATED & BENEFI LIFELONG NEEDS SKILLED ALL ENJOY STRONG ECONOMY ADAPTABLE MEETS A PROSPEROUS ACT NEEDS STRONG RESILIENT GROWTH DIVERSE ASSETS PROTECTED NIATIRAL PROTECTED NATURAL CHANGE **A SUSTAINABLE ACT** ASSETS RESPONSIBLY DEVELOPMENTS PROTECTED

A VIBRANT CITY WITH GREAT NEIGHBOURHOODS

- Canberra offers the best in sustainable city living
- Facilities are of a high-quality and meet community needs
- All Canberrans can participate in the city's cultural and social life

HIGH-QUALITY SERVICES

- Ensuring services are of high-quality, efficient and meet the needs of the community
- Maintaining the city and its assets
- Ensuring that members of the community can participate in decisions that affect them

A FAIR & SAFE ACT

- The ACT is a fair and safe place to live
- Canberrans benefit from living in a community that is safe, inclusive and respectful
- All can participate in community life

A HEALTHY ACT

- People in the ACT enjoy the benefits of good health and wellbeing
- As a community we are generally very healthy, active and avoid risky behaviour
- All Canberrans have timely access to primary and acute health care

EDUCATED & SKILLED

- All Canberrans benefit from a quality education
- Lifelong learning opportunities are available to all
- Our skilled workforce is adaptable to the needs of the economy

A PROSPEROUS ACT

- The economy is strong, resilient and diverse
- The economy meets the needs of the community
- The ACT enjoys economic growth

A SUSTAINABLE ACT

- Canberra is a fully sustainable city and developments are environmentally sustainable
- The ACT's natural assets are protected
- The ACT addresses climate change challenges responsibly

HIGH-QUALITY SERVICES A VIBRANT CITY WITH GREAT NEIGHBOURHOODS

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A VIBRANT CITY WITH GREAT NEIGHBOURHOODS

A vibrant city with great neighbourhoods needs available, well-planned and serviced urban land, and systems and structures to celebrate and promote public art, culture and heritage.

The Canberra Plan: Towards Our Second Century outlines the Government's vision of a city that:

- offers the best in sustainable living both at its heart and in its town, group and local centres;
- is endowed with quality urban design and infrastructure to meet the needs of its growing number of residents; and
- provides all Canberrans with the opportunity to participate in a diverse and rich cultural and social life.

Achieving this vision requires considered planning and investment in urban infrastructure, not only to deliver quality design outcomes in our centres and neighbourhoods, but also to encourage and support public art, major festivals, local community events and Canberra's position as a centre of creativity.

To this end, the Government has invested significant effort and resources into the:

- design, planning, development and release of urban land to provide Canberrans with opportunities to access housing across the spectrum of tenure options; and
- cultural life of the city, supporting its vibrant arts scene, cultural environment and community heritage

POLICY PRIORITIES	STRATEGIC INFRASTRUCTURE PRIORITIES		
URBAN DESIGN AND SPATIAL PLANNING			
 Optimising the Territory s social, environmental and economic returns from land releases Ensuring land-use policies provide a contemporary framework for the continued enhancement, growth and development of the city Delivering strategic sustainable planning and design Maintaining the ACT s digital cadastral database and making land information available Identifying urban renewal opportunities and developing town centres in a considered manner that focuses on the longer term 	 Ensuring appropriate spatial planning settings that reflect community expectations and deliver quality design outcomes Upgrading transport infrastructure for new developments and densification to reduce current congestion and cater for increased traffic volumes Planning for and delivering land releases that balance social, environmental and economic considerations providing for a mix of affordable and appropriate housing options Maintaining and developing appropriate digital and technological capability to facilitate informed decision making on urban land development Continuing the Master Planning Program 		
LAND DEVELOPMENT AND RELEASE			
 Increasing residential land releases for the affordable and sustainable development of the ACT Developing appropriate infrastructure to support land releases and urban infill 	 Delivering the Government's Indicative Land Release Program Coordinating delivery of infrastructure to support land release and urban infill 		
ARTS, CULTURE AND HERITAGE			
 Providing the community with real access to high- quality cultural facilities Preserving the Territory s natural and cultural heritage sites and objects 	 Improving cultural facilities including library services that are tailored to changing community needs and interests Enhancing accessibility and maintaining the Territory's heritage assets Delivering projects identified in the <i>Canberra City Area Action Plan 2010-2016</i> 		

URBAN LAND

As a planned garden city, Canberra is unique to Australia. Its leasehold system enhances the role of the Government in ensuring that affordable, diverse and appropriate housing options are available as the number of Canberrans grows and residential patterns change. However, this growth must also maintain the distinctive planned structure of the city.

The Government has dedicated significant resources towards providing the essential infrastructure that is necessary to facilitate estate development and sustain great neighbourhoods. Once this infrastructure development is completed, it is also essential that arrangements are in place for the ongoing management of these assets to make sure the community has access to quality services.

The *Indicative Land Release Program*¹³ is developed to guide the program of work around the appropriate level of residential, commercial, industrial and community and non-urban land releases. These targets are determined having regard to a number of factors such as market conditions, population projections and changing habitation patterns.

In conjunction with the 2011-12 Budget, the Government announced its intention to release 18,500 residential land dwelling sites by 2014-15. To provide a mix of housing options and allow for the utilisation and cost-effective maintenance of both new and existing infrastructure, 45 per cent or 8,440 of the 18,500 dwelling sites are located within the urban infill boundary. The remaining 55 per cent are located in greenfield areas.

GOVERNANCE

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The program of work required to develop and maintain the Territory's urban land has flowed across a number of agencies including the ACT Planning and Land Authority (ACTPLA), and the Departments of Land and Property Services (LAPS) and Territory and Municipal Services (TAMS). Under the new ACT Public Service arrangements these functions are distributed across the Economic Development, Territory and Municipal Services, and Environment and Sustainable Development Directorates.

The Economic Development Directorate is responsible for land development and release policies and programs. Municipal services, roads infrastructure and land management fall within the purview of the Territory and Municipal Services Directorate, and the Environment and Sustainable Development Directorate is responsible for strategic land use, transport and environmental planning.

KEY DRIVERS OF DEMAND

Key drivers of demand associated with the development and management of urban land include:

- demographic factors, including shifts in the proportion of people within age cohorts and household consumption;
- land release policy settings and programs;
- changes in technology impacting on demand; and
- changing community expectations and values.

COOMBS WATER QUALITY CONTROL PONDS



The construction of two ponds in the new suburb of Coombs is being progressed and will improve water quality for runoff from new development areas in the Molonglo Valley, as well as runoff from Stromlo Forest Park and Stromlo Village. The ponds will provide a source of non-potable water for irrigation and will significantly enhance the landscape amenity and appeal of the surrounding areas.

¹³ The 2011-12 to 2014-15 Indicative Land Release Program is available at: http://www.laps.act.gov.au/land_release

STRATEGIC INFRASTRUCTURE PRIORITIES URBAN LAND

	TWO YEARS	FIVE YEARS	TEN YEARS
 Ensuring appropriate spatial planning settings that reflect community expectations and deliver quality design outcomes 	A revised Spatial Plan	Development of a strategic plan for the 5,700 hectares of urban open space in the Territory Consider the merits of establishing a wetland in	Explore opportunities for innovation in infrastructure to support infill development
		Forde	
 Upgrading transport infrastructure for new developments and densification to manage transport demand 	Horse Park Drive Extension to Moncrieff Group Centre Valley Avenue Extension to Gundaroo Drive Prepare feasibility and proposal for Northbourne Avenue rapid public transit corridor including light rail	Molonglo North-South Arterial Road and Bridge over Molonglo River Canberra Avenue/ Mildura Street intersection signals and cycle path to Jerrabomberra Creek East Lake Wiluna Street Extension	Consider construction of East-West Arterial Road from the Molonglo Group Centre to Tuggeranong Parkway Construction of the Fyshwick Ring Road, Symonston Arterial Road New Canberra Railway Station in East Lake
 Planning for and delivering land releases that balance social, environmental and economic considerations providing for a mix of affordable and appropriate housing options 	Water quality control ponds for Weston Creek and Molonglo	Stage 2 of water quality control ponds and trunk sewer infrastructure to development in Molonglo Forward tree planting for the East Lake precinct urban development East Lake constructed wetland, silt trap and Jerrabomberra Creek improvements	
 Maintaining and developing appropriate digital and technological capability to facilitate informed decision making on urban land development 	Exploring opportunities to develop virtual infrastructure to capitalise on existing data		
 Delivering the Government's Indicative Land Release Program 	Releasing 10,500 residential dwelling sites Providing for an additional 211,315 square metres of commercial land	Releasing an additional 8,000 residential dwelling sites Making available an additional 170,816 square metres of commercial land	Further land release to meet demand

URBAN LAND			
Coordinating delivery of infrastructure to support land release and urban infill	John Gorton Drive Extension to Molonglo 2 Molonglo 2 water supply, trunk sewer and stormwater infrastructure Lawson South relocation of 132kV power line	John Gorton Drive Bridge over the Molonglo River Molonglo Group Centre infrastructure East Lake gas main relocation near Monaro Highway Three stormwater retardation basins in Woden Valley (2 in Mawson, 1 in Garran) Sewer infrastructure upgrade in Oaks Estate and Tuggeranong Town Centre West	Completion of East Lake transport, water supply and sewer infrastructure Construction of Jerrabomberra hydraulic infrastructure Trunk sewer and water supply infrastructure upgrade in Majura Valley

VIRTUAL INFRASTRUCTURE

While properly harnessed emerging technologies drive economic growth, they also increase demand for new and higher-quality public services and assets, particularly in health. The virtual infrastructure initiative will identify opportunities to develop alternative service delivery models which capitalise on existing infrastructure and information assets, resulting in innovative and targeted service models.

The challenge will be to strike the right balance between:

- infrastructure investment that increases the ACT's productive capacity and thus the material wellbeing of its residents; and
- continuing to fund and maintain infrastructure that supports traditional service delivery models which the community needs and expects.

Across the ACT Government, Directorates have significant holdings of spatial and aspatial data and information on all aspects of land use. The virtual infrastructure initiative will bring these data together and make them available to agencies through mapping tools, such as ACTMAPi and related databases, to construct models of the Territory's infrastructure needs over the next 20 to 50 years. The analytical tools will include 3D modelling software to enable the visualisation of development proposals across the Territory and an assessment of their impacts on the community.

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ARTS, CULTURE AND HERITAGE

A significant program of work is also underway to support the ongoing development and growth of the Territory's cultural and artistic character. This program of work covers urban renewal activities, collaborative work to develop and grow arts precincts across the Territory, and conservation and celebration of Canberra's heritage.

The Government manages 188 Aboriginal heritage sites, 121 European heritage sites and 40 natural heritage sites and has a range of programs and works under way to support the arts and cultural development in the Territory. It is also exploring options to enhance interactions with heritage conservation processes and is reviewing heritage administration.

A recent review of the arts in Canberra has also served as a fillip for the development of an ACT Cultural Facilities Plan. Consistent with another key recommendation of this review, the Government will explore options to further develop arts hubs at the Kingston Arts precinct, the Street Theatre and Ainslie Arts Centre over the coming decade.

The ACT Government also manages a range of recreational amenities that contribute to the lifestyle of Canberrans. This includes managing 487 playgrounds, many of which contain seats, tables and barbecues.

Recurrent annual programs exist for capital upgrades or refurbishment of playground and shopping centre assets. Other assets are replaced as part of regular maintenance programs, and larger upgrade projects for other asset classes are undertaken as required.

GOVERNANCE

The Territory and Municipal Services, Environment and Sustainable Development and Community Services Directorates, and the Cultural Facilities Corporation, are responsible for the implementation of policies and programs in this sector. These activities have been established to sustain and further develop arts, culture and heritage in the community.

KEY DRIVERS OF DEMAND

The ACT has the highest levels of cultural attendance and cultural participation in Australia. In addition, there is significant community interest in Canberra's history and heritage, including through the focus provided by the Centenary of Canberra in 2013. Service demand for infrastructure that supports the arts, culture and heritage of Canberra is driven by:

- population growth, and an ageing population that has time to read, research and participate;
- the rapidly changing technology and social networking environment where customers want to use multiple channels for their information needs; and
- the technical requirements of modern performing arts productions.

ACHIEVEMENTS

Opportunities for the community to engage in the arts and cultural activities have been enhanced by:

- the recently completed Kingston Arts Precinct Strategy;
- construction of studios and a residence at Watson Arts Centre;
- improvements to arts facilities in Tuggeranong, Ainslie, Manuka and Strathnairn;
- the opening of the Nolan Collection Gallery @ CMAG in the Canberra Museum and Gallery featuring a permanent display of works donated by Sir Sidney Nolan including a number from his *Kelly* series; and
- commencement of works for the Fitters' Workshop redevelopment to accommodate Megalo Print Studio and Gallery.

CANBERRA GLASSWORKS



Built and funded by the ACT Government, Canberra Glassworks is Australia's only cultural centre wholly dedicated to contemporary glass art.

At its core Canberra Glassworks is a working glassworks that provides access to glassmaking facilities for glass artists.

Australia has developed an enviable reputation nationally and internationally for the quality and skill of its glass artists. By providing essential equipment, space and development opportunities through the Canberra Glassworks, the ACT Government is giving these artists, and those that follow, opportunities to grow and develop their glass practice, and to further contribute to this very special local industry.

Canberra Glassworks provides artists with stateof-the-art equipment; intensive workshops taught by leading glass artists; studios and mentorship programs; and a unique context to explore, develop and realise new work.

Canberra Glassworks also provides diverse opportunities for visitors to interact with and learn about glass making and the heritage of Canberra's Kingston Powerhouse. Visitors can meet artists, see glassmaking as it happens, view exhibitions, take tours and have a hands-on experience working with glass.

BELCONNEN ARTS CENTRE



In 1997, the Belconnen community began meeting to explore the idea of having an arts and cultural centre for the north-west of Canberra, as the area was by then well established and home to educational facilities, government affairs and growing businesses.

The subsequent construction of the Belconnen Arts Centre arose from a clearly identified need to provide an arts facility for the Belconnen community to meet unmet needs in the area, and for arts practice in the wider ACT in general.

Designed by Williams Ross Architects and constructed by Project Coordination (Australia) Pty Ltd, the building incorporates contemporary environmentally sustainable design principles with easy access, low energy usage, light control and appropriate materials.

The Belconnen Arts Centre was officially opened in 2009. It is owned by the ACT Government and managed by Belconnen Arts Centre Incorporated.

STRATEGIC INFRASTRUCTURE PRIORITIES ARTS, CULTURE AND HERITAGE

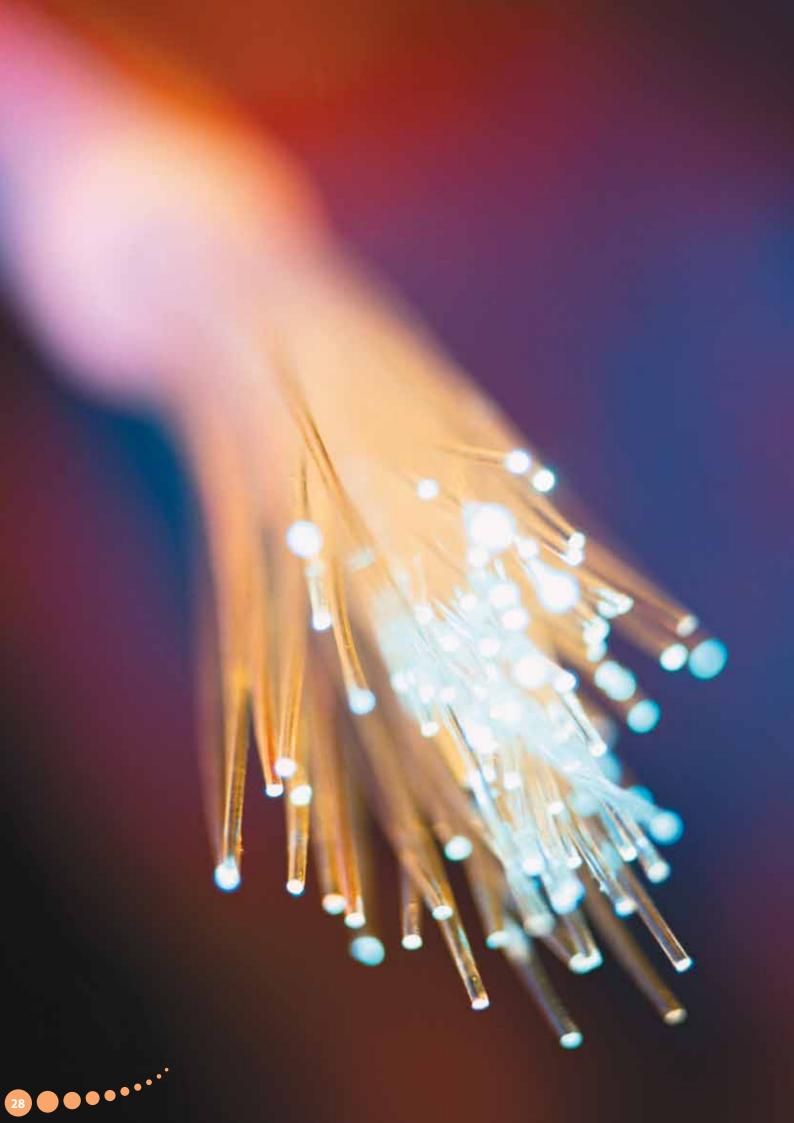
	TWO YEARS	FIVE YEARS	TEN YEARS
 Developing an engaging and vibrant city 	Civic Square cultural precinct master plan Civic Swimming Pool precinct master plan	Investigate pedestrian access to City Hill Braddon commercial precinct public realm redevelopment Significant renovation and updating of Civic Square, as Canberra's cultural and civic heart	Assess the need for future works to maintain and derive best value from investments
• Enhancing accessibility and maintaining the Territory's heritage assets	Melbourne Building surrounds and Odgers Lane heritage enhancement and public realm improvement Sydney Building surrounds heritage enhancement and public realm improvement	Present a select number of additional ACT Government-owned heritage properties as house museums that are open to the community on a regular basis, to assist in telling the story of Canberra through its historic places	



ARTS, CULTURE AND HERITAGE

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Improving cultural facilities including library services that are tailored to changing community needs and interests	Improved library services that are tailored to changing community needs and interestsLondon Circuit adjacent to Civic Square public realm improvementsA non-potable irrigation system for the EPIC siteDevelopment of low-cost accommodation options at EPICFinalise negotiation for a long-term lease over the service station site at EPICFitters' Workshop redevelopment to 	Implementation of Libraries and Lifelong Learning in the national capital strategy Expand the footprint of the Canberra Museum and Gallery (CMAG) within North Building, to create: • additional exhibition spaces, including expansion of the new Canberra Stories Gallery; • additional facilities for education and community programs; • an improved, larger foyer space with direct entry from Civic Square and incorporating a city centre hub for Canberra's heritage; and • expanded storage facilities to house CMAG's growing visual arts and social history collection A feasibility study for Stage Two of the Belconnen Arts Centre Explore development of additional Arts Hubs	Construction of Stage Two of the Belconnen Arts Centre A Molonglo Arts Centre
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HIGH-QUALITY SERVICES

To ensure that Canberrans have access to high-quality services, the Government continues to prioritise planning for transport, municipal, and information and communication technology infrastructure.

The Canberra Plan outlines the objectives of:

- providing consistently high-quality, timely, effective and cost-efficient services that meet the needs of the community;
- ensuring the city is well maintained and its assets protected; and
- enabling all members of the community to participate in decisions that affect them.

As assets such as roads and stormwater infrastructure age, more frequent maintenance will be required. The Territory's Strategic Asset Management Framework provides a set of principles to guide the staging and implementation of these works in ways that allow more efficient use of existing infrastructure. Such an approach also highlights the benefits of smaller ongoing replacement and refurbishment of service infrastructure.

However, it must also be acknowledged that it will be necessary to make strategic investments in major infrastructure works which respond to growing community needs. In some instances, this investment is offset by productivity gains. In addition, emerging technologies such as intelligent transport systems will also have a role to play in the future management and delivery of services. This is of particular relevance in areas such as transport.

POLICY PRIORITIES	STRATEGIC INFRASTRUCTURE PRIORITIES
 Minimising the volume of waste to landfill Providing and maintaining appropriate infrastructure to meet community needs and expectations 	 Building an inventory of urban renewal opportunities Maximising waste recovery Providing quality transport planning and infrastructure development Maintaining and improving trunk sewers, water supply, and stormwater mains and floodways Developing and implementing appropriate asset management processes Maintaining the Territory's open space assets
 Developing an Integrated Asset Management System to better manage, maintain and target infrastructure Ensuring municipal infrastructure meets modern standards Continuing to refine data management systems based on customer feedback and ongoing assessment of the processes Exploring innovative ways of delivering government services Communicating with the community 	 Maintaining the availability, functionality, supportability, security and capacity of existing ICT infrastructure to support the delivery of Government services to the community Adopting a whole-of-government approach to information and communication technology planning and use Developing strategies to effectively share government data with the community

TRANSPORT

Over the next decade the number of people travelling to work is expected to increase by more than 10 per cent, to around 238,000. As part of the Sustainable Transport Plan, by 2026 the Government is aiming for 16 per cent of daily commuters to travel to work by public transport, and a further 7 per cent to walk or cycle.

A transport system that manages traffic congestion will allow people to move across Canberra efficiently and effectively. As a result, Government infrastructure priorities will focus on managing travel demand by delivering a transport system that shifts the way people travel to work and move around the city, encouraging the use of public transport as well as walking and cycling. This includes measures to reduce transport sector emissions through encouraging more efficient passenger, public transport and freight vehicles and reducing travel demand through land-use change, mode shift and travel demand management.

The ACT Government is acutely aware of the need to transition to a sustainable transport future while fulfilling the needs of today's drivers and commuters. The 2011-12 Budget will see major upgrades to transport infrastructure across Canberra and will deliver a more sustainable, efficient network with more than \$256 million to develop a transport system that meets the needs of Canberrans. This includes funding for the forward design of a transitway along Northbourne Avenue to streamline public transport movements along the corridor.

The significant investment in sustainable transport is complemented by substantial roads capital works projects including the construction of Majura Parkway, which will replace Majura Road linking the Monaro Highway and the Federal Highway.

The Government will work in partnership with the Commonwealth to progress this project with funding contributions of \$144 million each. This is a nationally significant project that aligns with a number of Infrastructure Australia's strategic priorities and will transform freight travel in the region.

GOVERNANCE

The Environment and Sustainable Development Directorate is responsible for coordinating and developing transport policy. The Territory and Municipal Services Directorate manages the Territory's transport infrastructure and is also involved in planning for and developing an integrated transport system for the Territory. Synergies also exist between the work of these directorates and the land development planning which the Economic Development Directorate coordinates.



CURRENT STATE OF INFRASTRUCTURE

Increases in the number of people using roads and transport infrastructure, combined with the expectation that freight movement will double over the next ten years, will put greater stress on transport infrastructure. Thus further areas of focus include creating a safer transport system that minimises the risk of crashes and a system that integrates sustainable urban development and supports the environment.

The Government is committed to meeting its sustainable transport target of 20 per cent of work trips by 2011. Achieving this will require a shift to increase walking, cycling or public transport and consequent investment in infrastructure, services and promotion to continue to meet these transport ambitions.

Much of Canberra's transport infrastructure was built in the 1970s and 1980s and will require increased maintenance as it reaches the end of it operational life. This consideration is increasingly relevant as these assets are being used more frequently, particularly arterial roads and community path networks.

The ACT Climate Change Strategy 2007-2025 target is a reduction of 60 per cent of 2000 levels of greenhouse gas emissions by 2050. The four objectives of the strategy are:

- to be smarter in how we use resources;
- to design and plan our city to be more sustainable;
- to build our capacity to adapt to the changes in climate that we are now beginning to face, and possible future changes; and
- to improve our understanding of climate change, its causes and effects, and how we need to respond.



EDUCATED & SK

By 2010-11, the city's public transport corridors had been reserved in the Territory Plan, and bus priority lanes, queue jumps and lanes were completed between Woden and the City, and along the Belconnen to City rapid transport corridor. Over the next four years, public transport infrastructure will be considerably expanded with major transitways, stations, stops, passenger information systems and park and ride/bike and ride facilities completed. Similarly, the extensive network of cycling and pedestrian infrastructure – including on-road cycle lanes, off-road paths and suburban community paths – will be expanded and improved to make active transport an easier and healthier travel choice for Canberrans.

The potential impact of increased temperatures and extreme weather events on transport infrastructure will be assessed through climate change vulnerability assessments and built into the design of new transport infrastructure works where appropriate.

KEY DRIVERS OF DEMAND

The ACT community and its surrounding regional communities generate demand for services provided by the assets considered in this Plan. Population projections indicate that the Territory's median age is increasing. There will be significant shifts in the age distribution to large growth in the numbers of persons at all ages over 60 years. The increase in the proportion of the population aged over 60 will have significant effects on the demand for services. The travel demands and expectations of the aged population are likely to differ from the pattern of demand that the current population has produced. Energy costs, availability and suitability of alternative modes of travel will influence their choices.

Future demand for infrastructure will hinge on:

- population growth;
- housing composition and density;
- household incomes; and
- planning and policy settings.

New residential land-use expansions, such as 'greenfield' sites within Gungahlin and Molonglo, will impact on the capacities of the existing arterial road network.

Cross-border transport, to the east of Canberra, particularly from Queanbeyan, is an important driver of transport demand for the Territory.

Over 60 per cent of Queanbeyan residents work in Canberra each day and 40 per cent of Queanbeyan's workforce commute from Canberra. Furthermore, it is essential that the Australian Capital Region plans for growth in national freight movement, which is projected to double by 2020. Initiatives such as the Majura Parkway will be an important link to the national freight network, and will support more efficient freight movement, within the Territory and to and from the surrounding region.

The Territory's Spatial Plan is currently being reviewed. A key component of this work is development of a new ACT Planning Strategy which will include consideration of where denser development could be located in relation to the mass public transport transit corridors or network 'spines', shown in the draft 2031 strategic public transport network. This is consistent with work being completed on the further development of the Transport for Canberra policy, a strategy designed to respond to and manage transport demand.

Public transport planning will also need to anticipate demand for increased trip making, taking into account projected population and employment growth. Meeting these challenges proactively will create a more efficient, accessible and streamlined transport system. A broad range of transport options for the community will support a simpler and more frequent transport network, with strategic infrastructure to provide flexible and intermodal travel options.



STRATEGIC INFRASTRUCTURE PRIORITIES TRANSPORT

	TWO YEARS	FIVE YEARS	TEN YEARS
• A transport system that reduces traffic congestion and allows people to move across Canberra efficiently and effectively	Stage 1 of the City- Belconnen Busway Expansion of the Territory's walking and cycling network Southern Cross Drive traffic flow improvements Commence construction of Majura Parkway	A third lane on Parkes Way from the Glenloch Interchange to the Acton tunnel Duplication of William Slim Drive A traffic management centre for the Territory Upgrading the Barry Drive and Clunies Ross Street intersection	Strategic road infrastructure for parkways, arterials and new suburban access Modernising parking infrastructure to support integrated smartcard use Maintaining Canberra's network of cycling infrastructure, bus shelters and bus stops and street lighting
A safer transport system	A pedestrian bridge in Kambah Smart road safety technology	Introducing variable message signs and point to point cameras	Smart technology and better roads to improve road safety
• A transport system that integrates sustainable urban development, supports the environmental and economic goals of the ACT, and supports efficient and sustainable freight transport	Investigate opportunities to introduce electric vehicle technology in the Territory	Infrastructure to support new vehicle technology like electric vehicles	
 A continued shift in the way people travel to work and move around the city 	Northbourne Avenue bus priority measures Bus infrastructure at key locations, including ANU, College Street, Haydon Drive, Canberra Avenue and Canberra City Expand the network of Park and Ride facilities at key locations on public transport corridors, including Exhibition Park, Erindale Shopping Centre, Phillip Pool, Cohen Street in Belconnen, Gungahlin, and Tuggeranong A Real Time Passenger Information System New bus stations at Gungahlin, Erindale, ANU and Barton	Expanding the network of Park and Ride and Bike and Ride facilities aligned with public transport corridors Expanding the bus fleet and upgrading bus depots Relocation of the terminal site and railway facilities in East Lake	Increasing the city's bus fleet Expanding the network of high frequency public transport corridors Bus priority and transitways on key corridors New public transport stations at Molonglo and Fyshwick Completing the network of Park and Ride and Bike and Ride facilities



MUNICIPAL SERVICES

As the city grows and the Territory's infrastructure ages, it will be necessary to develop strategies to address the growing demand for services while maintaining the quality of services. For example, additional land development activity invariably generates increased demand for municipal services. These services encompass a wide range of amenities, from rubbish collection to sewerage and footpath maintenance.

Policy priorities in this area over the next ten years include developing municipal infrastructure that meets modern needs, minimising the volume of waste to landfill and establishing waste management facilities to accommodate future growth in new town centre developments.

CURRENT STATE OF INFRASTRUCTURE

The Government provides a diverse range of municipal services to the community. This includes land management and planning for about 50 classes of assets, including buildings, toilets, shelters, fences, gates, roads and trails and shopping centres.

GOVERNANCE

The Territory and Municipal Services Directorate has responsibility for these functions. ACTEW Corporation is also involved in utilities and sewerage works.

KEY DRIVERS OF DEMAND

The key drivers of demand for municipal services infrastructure over the next ten years are:

- responding to changing demographics in central Canberra and Woden Valley and growth in Gungahlin;
- maintaining vital infrastructure as it ages;
- managing public expectations for service level provision;
- addressing climate change challenges; and
- sustaining a growing and dynamic economy.

Particular areas of the ACT, such as Molonglo and Gungahlin, are already experiencing extensive growth, while areas of established suburbs are undergoing urban infill. This will create changes in demand for certain types of assets across the municipal services spectrum.

ACHIEVEMENTS

Over the past year significant works have been completed to facilitate the delivery of high-quality municipal services for Canberrans. This includes:

- revitalisation activity in the Woden and Civic town centres;
- improvements to the way waste is collected, recycled and disposed;
- upgrades to the public spaces along Bunda Street in the City Centre;
- shopping centre upgrades completed in Melba, Garran, Deakin and Ainslie; and
- new directional and information signage for the major public parks across Canberra.

In 2009-10, total resource recovery was approximately 588,000 tonnes, an increase of 3,000 tonnes on the previous year. While this is a positive indication, new strategies to minimise waste to landfill and maximise resource recovery are currently being explored.

Master plans for the West Belconnen Resource Management Centre and Mugga Lane Resource Management Centre are nearing completion and will provide a strategic framework for development and for use over coming decades.

STRATEGIC INFRASTRUCTURE PRIORITIES MUNICIPAL SERVICES

	TWO YEARS	FIVE YEARS	TEN YEARS
 Developing and implementing appropriate asset management processes 	Develop an asset management planning framework supported by asset management systems and asset data Planning infrastructure for the management of unleased public land in Gungahlin and other areas of development	Detailed plan of infrastructure upgrades and maintenance A strategy for linking infrastructure planning with operational requirements Preparation and implementation of the East Molonglo River Corridor design Detailed planning for an off-road biking facility in the rural areas of the ACT Planning for a new cemetery/crematorium Continue planning infrastructure for the management of unleased public land emerging from new estate developments and land transferred from the Commonwealth	
 Building an inventory of urban renewal opportunities 	Installing enhanced city path and street lighting Augmenting walking and cycling infrastructure Finalising the Bunda Street improvements	Continued shopping centre upgrades Continued town and district park upgrades Development of new and improved walking tracks and trails to develop a Canberra Great Walk Public toilet upgrade program Continued establishment of infrastructure for Molonglo River Corridor Continued establishment of infrastructure for the management of unleased public land	Smart technology and better roads to improve road safety



Maximising waste recovery	Development of Hume Resource Recovery Estate through new infrastructure partnerships to increase resource recovery from commercial waste Extension of the current landfill cell at Mugga Lane Resource Management Centre and investigation of options to ensure Canberra's future landfill needs are met	Development of waste facilities and technologies enabling the recovery and processing of organic waste from the commercial and domestic sectors Ongoing development of Hume Resource Recovery Estate Expansion of the Mugga Lane Resource Management Centre Waste disposal facilities to accommodate future growth in new town centre developments	Waste management facilities to accommodate future growth in new town centre developments Ongoing development of Hume Resource Recovery Estate Expansion of the Mugga Lane Resource Management Centre
Maintaining the Territory's open space assets	Shopping Centre Upgrade Program Town and District Park Upgrade Program Improvements to public space directional and interpretive signage Establishment of infrastructure for Molonglo River Corridor Establishment of infrastructure for the management of unleased public land		Rationalisation of urban open space

INFORMATION AND COMMUNICATION TECHNOLOGY

The information and communication technology (ICT) infrastructure underpinning the delivery of almost all ACT Government services is highly varied and complex. This infrastructure constitutes the systems required to run the public service and the machinery of Government and includes:

- an ACT Government-owned high bandwidth fibre network, together with associated switching and routing devices, which connects most government operations, including schools, to computing and telephone services;
- data centres at various locations to house the general 'back-end' hardware infrastructure on which most of the Government's computer systems are 'hosted';
- storage and backup technology infrastructure to securely store and protect the ACT Government's electronic information holdings;
- various software systems that underpin business processes across the ACT Government, including generic systems such as email, internet and word processing, large business systems such as those that support payroll, finance, transport, health and education services, and specialised software applications that support specific work, such as emergency management systems, mapping software and health treatment software; and
- numerous end-user devices, typically personal computers, laptops, phones and printers, as well as specialist devices.

The ACT Government fibre network reflects best practice. To maximise community benefit from this infrastructure it is necessary to direct strategic effort towards uses and interfaces between systems across government.

CURRENT STATE OF INFRASTRUCTURE

While the ACT Government's ICT infrastructure is generally well maintained, long-term and ongoing investment is required to keep it current. Given the varying hardware and software lifecycle stages of individual components associated with this type of infrastructure, investment is required at a fairly constant rate.

In some cases, infrastructure such as the network, data centres and storage have a finite capacity and from time to time new strategies will need to be developed to cater for growth.

KEY DRIVERS OF DEMAND

The capability and need for further development of ACT Government ICT infrastructure is driven by:

- community expectations associated with the accessibility, transfer and storage of information;
- demand for information to inform service planning and delivery processes within government;
- the emergence of new technologies, software and devices;
- changes to the Public Service structure; and
- an increased need for flexible computing options and access points to the Government network.

ACHIEVEMENTS

The Government has dedicated resources to ICT infrastructure across government to support the delivery of high-quality services for Canberrans. Recent achievements include the following:

- The storage infrastructure strategy was reviewed to ensure quality standards and proactively identify opportunities for ongoing improvement.
- Acquisition of disk backup technology allows for more short-term backup data to be held on appliances with half the raw capacity of the older units. Benefits of this work include a 70 per cent reduction in physical space, a 60 per cent reduction in heat generated and thus cooling required, a 60 per cent reduction in power consumed and a substantial reduction in the amount of tape media required to hold short-term retention backups.
- Upgrades to 'just-in-time' storage infrastructure provides for future growth, allowing the ACT Government to target resources to areas of need while incrementally adding system capacity.
- Routine refreshment of numerous hardware and devices has been completed as part of the Government's lifecycle refresh policy. Network components have been upgraded in keeping with prudent lifecycle management in addition to delivering 120 customer projects to replace, refresh, or enhance ICT.

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STRATEGIC INFRASTRUCTURE PRIORITIES INFORMATION AND COMMUNICATION TECHNOLOGY

	TWO YEARS	FIVE YEARS	TEN YEARS
 Adopting a whole of government approach to information and communication technology planning and use 	Initiatives arising from the pending Whole- of-Government ICT Strategic Plan	Continue implementation of the Whole-of-Government ICT Strategic Plan	Consider reviewing the Whole-of-Government ICT Strategic Plan
 Developing strategies to effectively share government data with the community 	ACTGov 2.0 Initiative Exploring strategies to enhance ACTMAPi use	Looking at future technologies for flexible delivery of Government initiatives	Explore opportunities that arise from contemporary technologies
 Maintaining the availability, functionality, supportability, security and capacity of the existing ICT infrastructure to support the delivery of Government services to the community 	Replacement of primary high-speed storage area network Replacement and upgrade of various agency business systems Replacement of various superseded hardware and software platforms and standards as per the Government's Technology Roadmap Introduction of new technologies to meet business needs Dealing with approaching capacity issues for the Territory's data centres	Management of major upgrade and replacement lifecycles Business system software upgrades	Ensuring the ongoing relevance and effectiveness of the Territory's data centres



A FAIR AND SAFE ACT

The Government invests in community, justice and emergency services infrastructure to support a fair and safe community.

The ACT Government has a vision of Canberra becoming a place where all people reach their potential, make a contribution and share the benefits of our community. Ensuring our community is both fair and safe is crucial in achieving that vision. *The Canberra Plan* captures this goal through a vision of a city where:

- all Canberrans enjoy the benefits of living in a community that is safe, inclusive and respectful of human rights;
- all Canberrans are able to fully participate in community life; and
- the most vulnerable in the community are respected and supported.

POLICY PRIORITIES	STRATEGIC INFRASTRUCTURE PRIORITIES
 Promoting the protection of human rights in the Territory Providing effective and cohesive emergency response and management Implementing and enforcing legislation covering regulatory functions of government Protecting and preserving life, property and the environment 	 Ensuring that court and justice facilities provide appropriate accessibility and capacity for Canberrans Providing facilities to support ACT Policing Providing for regulatory services capability Building emergency and ambulance service capability Providing infrastructure to support the Strategic Bushfire Management Plan Version 2 implementation Developing and implementing improved information and communication technology to support justice and emergency services
 Preventing violence against women Providing quality public and community housing that meet the needs of applicants and tenants Reducing concentrations of disadvantage Implementing the Aboriginal and Torres Strait Islander Service Delivery Framework 	 Investing in regional community facilities Developing a housing portfolio that corresponds with changing community needs and tenant profiles Locating community infrastructure and housing to address locational disadvantage Constructing facilities to support the delivery of Aboriginal and Torres Strait Islander services
 Ensuring that affordable housing options are available to support community needs, in particular older Canberrans Strengthening the capacity of people with disability, their families and carers to maximise control over their lives Investing in early intervention and prevention Supporting young people at risk of social isolation Facilitating the delivery of respite services 	 Developing suitable social housing options for older Canberrans and people with disability Establishing child and family support facilities Developing information systems that facilitate better targeted interventions and improvements to existing services

JUSTICE AND COMMUNITY SAFETY

Future infrastructure development in this area will continue to focus on the reinvigoration or replacement of existing infrastructure to meet the growing needs of the city. This work will provide the basis for a justice and emergency services system that meets modern standards.

Construction of Supreme Court facilities, a mid-life upgrade to the Magistrates Court Building, completion of the Emergency Services Station Relocation Program, and upgraded policing facilities at Tuggeranong and Gungahlin have been identified as emerging areas of priority. These areas reflect current projections of community need and will be refined and assessed against the range of priorities considered as part of the Budget process.

GOVERNANCE

The Justice and Community Safety Directorate is responsible for infrastructure development to support the Territory's legal and security functions. In addition, the Territory and Municipal Services Directorate is engaged with the development of some works associated with the delivery of emergency services.

CURRENT STATE OF INFRASTRUCTURE

The Territory's justice and community safety infrastructure includes courts, policing and correctional facilities, and emergency services.

Facilities which have been completed or are being completed include:

- a training facility for the Emergency Services Authority (ESA), under construction in Hume;
- the Phillip Forensic Medical Centre; and
- a Rural Fire Service Shed in Tidbinbilla.

The Emergency Services Authority and ACT Policing are well placed to support the current and future demands of the Canberra population. However, ongoing maintenance of existing assets is required to derive good value for the community from infrastructure including the:

- Supreme Court building;
- Winchester Centre;
- Kingston Forensic Medical Centre; and
- Symonston Periodic Detention Centre.

In some instances, these facilities are being replaced by new facilities that are currently under construction.

KEY DRIVERS OF DEMAND

Courts

To ensure accessibility to justice and community safety services it is important to continue to develop supporting infrastructure in response to the demands of a growing city.

Investment in redevelopment of key infrastructure that supports judicial services for the community is also important and highlights the need for ongoing asset maintenance and assessment of the life span of infrastructure.

Emergency Services

The need for additional ACT Ambulance Services stations is mainly driven by demand or population. Similarly, demand for additional Fire Brigade stations is principally driven by the need for coverage or the number of buildings. As the city grows geographically and the effects of changing climatic conditions become more evident, harnessing opportunities to better target government investment and to innovate in this area become more important.

Policing

There are currently six police stations of varying age and condition in the Territory. Over the last decade the Government has replaced, or is in the process of replacing, facilities in Woden and Belconnen.

ACHIEVEMENTS

Key infrastructure investments to support the delivery of modern justice and community safety services in the Territory include:

- investment in information and communication technology to implement the first mandatory checking system in the country for those working with children and vulnerable people;
- a new Belconnen Police Station;
- Street Safety CCTV Systems in Civic, Manuka and Kingston;
- a new ESA Headquarters at Fairbairn; and
- creation of an additional 12 Community Fire Units.



BELCONNEN POLICE STATION



In response to population growth in the area, the Government has commenced construction of the Belconnen Police Station.

In the next two years, the Government will also deliver:

- planning and design for a new Supreme Court;
- establishment of a secondary Territory Crisis Centre facility;
- finalisation of planning for implementation of the Emergency Services Station Relocation program;
- a new Forensic Medical Centre in Phillip; and
- upgrades to existing Emergency Services Authority facilities.

STRATEGIC INFRASTRUCTURE PRIORITIES

	TWO YEARS	FIVE YEARS	TEN YEARS
 Ensuring that court and justice facilities provide appropriate accessibility and capacity for Canberrans 	Design for the long- term replacement of the Supreme Court building Feasibility study for improved courts and tribunal case management system Review of future accommodation requirements at the Alexander Maconochie Centre Legal Aid Commission New Directions Program Phase 2	Supreme Court, Knowles Place and London Circuit public realm improvements Assess the need for additional facilities at the Alexander Maconochie Centre	Magistrates Court Building and precinct maintenance and upgrades
 Providing facilities to support ACT Policing 	Completion of the new Belconnen Police Station Completion of the new Phillip Forensic Medical Centre Review of future ACT Policing accommodation requirements	Police station upgrades	Upgrades and maintenance of police facilities

EMERGENCY SERVICES

 Building Emergency Services Agency capability 	Commence standardised design of future Emergency Services Authority stations	Consider construction of new Emergency Services Authority facilities under stage 2 of the Station Relocation program	Maintain facilities through ongoing planning and prioritisation of such works
 Providing infrastructure to support the Strategic Bushfire Management Plan Version 2 implementation 	Tidbinbilla Rural Fire Service Shed	Assess the effectiveness of the Strategic Bushfire Management Plan Version 2	Explore opportunities for continued improvements to bushfire management systems in the Territory
 Developing and implementing improved information and communication technology to support emergency services 	Replacement of critical Emergency Services Authority ICT infrastructure, including rollout of the Mobile Data Solution (MDS) dispatch and response technology	Develop strategic plan to maintain MDS assets	Assess the effectiveness of ICT to support emergency services

COMMUNITY SERVICES AND HOUSING

The ACT Government is committed to ensuring that all Canberrans are able to lead fulfilling lives, in a community that values and respects them. The Canberra Social Plan reaffirms this commitment and further defines strategies to support the rights and needs of the most vulnerable in our community.

The 2010 Infrastructure Plan identified opportunities for a more coordinated approach to developing community infrastructure and services across government in relation to social housing, childcare, family health and aged care. It also noted the need to maintain and renovate current properties as well as develop needs-focused infrastructure around aged care and families.

GOVERNANCE

The Community Services Directorate, formerly the Department of Disability, Housing and Community Services, is responsible for the delivery of community facilities, social housing and other human services infrastructure.

CURRENT STATE OF INFRASTRUCTURE

A large number of the ACT Government's community facilities and public housing dwellings were built between the 1950s and 1970s. As a result, maintenance works will be needed over the coming decade for the upkeep of, and improvements to, these properties. In 2009-10 the Government spent \$10.4 million on improvements to dwellings and \$38 million on repairs and maintenance. In the same year, 99 dwellings were acquired, 65 built and 34 purchased.

In 2010, the Government commissioned a Planning Study and Territory Plan Variation for the Bega, Allawah and Currong complexes to identify opportunities to redevelop public housing stock. The study is now being considered by the Government.

Works to maintain and refurbish community facilities continued in 2010. This included facilities at the former Tharwa and Rivett Primary Schools and work at the Belconnen, Gungahlin, Lanyon and Majura Community Centres.

Work is progressing on a Seniors Club in Tuggeranong. In addition, regional community hubs, two neighbourhood halls and a Child and Family Centre in Holt have all been completed.

KEY DRIVERS OF DEMAND

Key drivers of demand for social housing include:

- household formation;
- Commonwealth agreements and policy settings; and
- diversionary or transitional opportunities from social housing.



ACHIEVEMENTS

Significant infrastructure continued to be delivered in the social housing sector in 2010. This included:

- the completion of housing funded under the Commonwealth Nation Building and Jobs Plan and social housing initiatives;
- continuing modifications to public housing properties to give older people or those with disability the opportunity to remain where they are;
- construction of a house in Ainslie for three young women who are part of the *Stepping Stones for Life* group, completed in June 2010. The property was funded through the Disability Assistance Package;
- as part of the *Young People in Residential Aged Care* program, construction of a house for four people under the age of 50 with complex needs. The program is jointly funded with the Commonwealth Government;
- construction of a property in Narrabundah for three women and three men with high and complex needs; and
- construction of a six bedroom property to provide accommodation options for people with disability living with ageing parents in Hackett.

Since the release of the last plan, significant work has been completed or commenced on infrastructure which supports important community services. This includes:

- identification of sites for Child Care Centres in Holt and Holder with design work and preliminary sketch plans prepared providing for approximately 100 places at each centre;
- commencement of construction of the Tuggeranong Seniors Club in Greenway;
- completion of refurbishment work on the Aboriginal and Torres Strait Islander Centre;
- opening of a third Child and Family Centre in Holt which focuses on working with Aboriginal and Torres Strait Islander families, child care services and schools to deliver maternal and child health services, therapy and child development and family support programs;
- construction of four regional community hubs at Chifley, Cook, Holt and Weston and two community halls at Bonython and Griffith; and
- exploration of further child care centre sites in areas of demand to support a further 800 places across the Territory, including in Holt adjoining the recently opened Child and Family Centre.

WEST BELCONNEN CHILD AND FAMILY CENTRE



The new Child and Family Centre, located in Holt, is an important addition to services for children and their families in the West Belconnen region.

The early years of a child's life set the foundation for their future health, development and learning. The centres are a 'one-stop shop', supporting families during this important time.

Families of West Belconnen and the surrounding Belconnen region will be able to access early childhood development, learning, health and wellbeing services of the high standard that they have come to expect from the existing Child and Family Centres at Gungahlin and West Belconnen.

Designed with community input from children and Aboriginal and Torres Strait Islander families, the Centre features a rainbow serpent, an Indigenous Garden with a yarning pit, and mosaic art by local artist Dira Horne.

The Centre also features a Sustainable Energy Showcase, to demonstrate alternative power generation technologies. The features of the Sustainable Energy Showcase include five solar panels, a small wind turbine, six green walls and six rainwater tanks.

The West Belconnen Child and Family Centre was opened on 2 May 2011. The Centre was jointly funded by the Commonwealth Government and ACT Government.

STRATEGIC INFRASTRUCTURE PRIORITIES COMMUNITY SERVICES

		TWO YEARS	FIVE YEARS	TEN YEARS
	 Ongoing role for volunteers and carers Growing demand for community services in emerging suburbs 	Construction of the Flynn Community Hub	Continuing to identify and upgrade appropriate accommodation for community service providers	Continuing to identify and upgrade appropriate accommodation for community service providers
	 Ongoing partnerships in service delivery 		Providing two new neighbourhood halls in Gungahlin and North Canberra	Providing a new neighbourhood hall in Molonglo Exploiting opportunities
			Providing one additional Regional Community facility in north-west Belconnen	to provide community accommodation in residential, commercial and retail developments and in mixed use centres
			Exploiting opportunities to provide community accommodation in residential, commercial and retail developments in mixed use centres	Assisting existing North Canberra Community Centre to respond to locational pressures and changing demands
			Assisting existing Woden, Weston Creek and Belconnen Community Centres to respond to locational pressures and changing demands	
	 Developing information systems that facilitate better targeted interventions and improvements to existing services 	Establishing a central Client Information Management System for disability services		
	 Investing in community facilities 	Continuing a rolling program of capital works for community facilities	Explore the need for community facilities in new suburbs	
		Investigating the provision of disability facilities in existing ACT playgrounds		
		Finalising a Community Facilities Asset Management Strategy		
		Finalising the review into community facilities leasing arrangements		
		Maintaining a rolling program of community facility condition audits including environmental issues		
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HOUSING

- Developing a housing portfolio that addresses changing community needs and tenant profiles, including:
- challenges of multi-unit properties
- public housing in emerging suburbs
- ageing tenant profile
- increased demand for services
- increasing cost of water and energy
- ageing housing stock

Assessing options for the redeveloping the Bega, Allawah and Currong Apartments in Braddon to ensure sustainability of the site

Implementing the outcomes of the East Lake Planning Study

Re-tendering the total facilities management contract for the public housing portfolio

Maintaining a rolling program of condition audits for public housing

Finalising the Public Housing Asset Management Strategy

Developing strategies to deal with an ageing housing stock and continue sustainability upgrades including water and conservation design

Program of multi-unit redevelopment on public housing transport corridors, including the Northbourne Avenue redevelopment

Deliver the Intentional Community as a housing option for people with disabilities

 Locating community infrastructure and housing to address locational disadvantage Implementing a redevelopment program for multi-unit housing sites and existing public housing

Upgrading and improvement to thermal performance of existing public housing stock

Public housing construction program in emerging suburbs

Redevelopment of public housing sites close to services

Development of housing options for older residents and those with disability

Water and energy conservation design for new and existing public housing

Training Directorate, and non-government

partners

Options for future development and maintenance of public housing

Program of multi-unit redevelopment based on age and condition

Continuing the public housing construction program in emerging suburbs

Development of public housing integrated into mixed use development with access to services, facilities and transport

Developing new technologies for public housing construction and service

Investigating the feasibility of a full-service children and young person's centre involving the Health Directorate, the Education and

CHILDREN, YOUTH AND FAMILIES SERVICES

- Increasing demand for childcare
- National Quality Framework
- Improved integration of childcare with community and education
- Growing teenage population in newer suburbs
- Ongoing reforms to the juvenile justice system
- Support for young people in the community

Release five sites for child care centres in areas of greatest demand including West Belconnen (Holt) and Weston Creek (Holder)

Building a child care centre in Holder and one in Franklin as part of the Early Childhood School

A number of child care extensions

Planning for the development of child care centres in Molonglo Valley

Explore the need for a fourth Child and Family Centre in Woden/Weston Creek district

Investigate the need for a fifth Child and Family Centre to service Molonglo

Upgrade existing child care centres to assist in meeting the National Quality Framework

Investigate the need for additional site releases for early childhood education and care

Provide for youth activities and support in existing regional community facilities Strategically aligning child and family facilities to respond to changing demographics across the Territory

Assess the need for new child care centres in Molonglo

Release additional sites for early childhood education and care responding to demand

Explore the appropriateness of a youth centre in Molonglo

Investigate the need for an additional Child and Family Centre

OLDER CANBERRANS

- Increase in the number of older residents
- Increased ageing in place
- Increased demand for services for the aged
- Increasing pressure on existing services
- Post-employment rental accommodation

Construction of the Tuggeranong Senior Club in Greenway

Trialling a Virtual Retirement Village Provide additional public housing for older persons dispersed in the community

Develop a broader range of accommodation types and price points for older renters

Develop a suite of accommodation supports for ageing in place

Assist existing seniors clubs to respond to locational pressures and changing demands Explore the appropriateness of developing additional public housing stock for older persons dispersed in the community

Continue to support a broader range of accommodation types and price points for older renters

Consider the need for a new seniors club in Gungahlin





A HEALTHY ACT

Investment in infrastructure to support the health care needs of the community is essential as the city grows and the composition of its population changes.

The ACT Government has embarked on an ambitious plan to reform health care, designed to meet the community's needs in the next decade and beyond. This program has been developed to ensure Canberrans have access to:

- timely acute and primary health care;
- health care which focuses on early intervention and prevention; and
- a health care system that is grounded in the principles of well-being, and safe and respectful patient care.



POLICY PRIORITIES	STRATEGIC INFRASTRUCTURE PRIORITIES
Providing effective and efficient services	 Continuing to meet the growth in demand for health services through extra capacity and by redesigning care delivery systems
 Exploring opportunities to use technology better and provide care in different ways Identifying new models of care across the continuum of health services Providing locally based care that meets the needs of the ageing population 	 Enhancing productivity through better use of technology and innovative solutions, including different ways of providing care
 Achieving a comprehensive health system that protects and improves the health of people Strengthening staff skills and professionalism Achieving a system of care and support that improves the quality of life for vulnerable groups 	 Implementing a comprehensive capital asset development plan to build a sustainable and modern health system to ensure safety, availability and viability of quality health care in the ACT for now and into the future

A complex mix of population ageing, changing technology, and provider and consumer expectations is driving a significant increase in demand for health services. The Capital Asset Development Plan (CADP) was developed in response to this growth in demand for health care. CADP is an important example of the approach the Government is adopting to adapt to emerging priorities by:

- identifying new models of care across the continuum of health services;
- exploring opportunities to use technology better and provide care in different ways;
- facilitating workforce sustainability; and
- maintaining existing infrastructure.





A PROSPEROUS

GOVERNANCE

The Health Directorate is responsible for coordinating infrastructure development works in this sector. However, progress reporting on CADP is overseen by an across government working group.

CURRENT STATE OF INFRASTRUCTURE

An analysis and assessment of the condition of existing infrastructure has been completed to inform planning for future facilities as part of the development of CADP.

An assessment of engineering services at the Canberra Hospital has identified gaps in service infrastructure and building plant and equipment. In addition to the new building program underway, \$15 million has been provided to address immediate infrastructure issues on the site and to undertake forward design for infrastructure works at the Canberra Hospital campus.

The current Health Centre network is being expanded to meet growing demand with a new centre to be built in Gungahlin, the replacement of the Belconnen Centre with a larger facility, and expanded facilities at Tuggeranong. The replacement of the Phillip Health Centre is also planned.

A rolling program of building condition assessments is being undertaken at all other health sites. The \$3.6 million Capital Upgrades Program enables minor works to be undertaken to ensure these facilities continue to meet user needs.

An annual \$5 million replacement program has been established to ensure medical plant and equipment is available to meet clinical needs. These works are prioritised based on age, condition, risk and functionality.

KEY DRIVERS OF DEMAND

The number of people aged 85 years and over in the Territory is expected to increase by 424 per cent or 22,500 persons by 2056.

In addition, ACT Government projections suggest that the population will be slightly skewed to the north side of the Territory by the end of this decade, with much of the ACT's population growth projected to occur in the new development areas of Gungahlin and Molonglo.

A complex mix of population ageing, changing technology and consumer expectations is also driving a significant increase in demand for health services.

Health Directorate modelling projects the ACT's public hospital admissions will increase by 77 per cent and overnight hospital admissions will increase by 49 per cent by 2022.

Compounding these demand pressures is an ageing capital asset base which is becoming increasingly difficult and costly to maintain. The current physical

capacity of this asset base is being fully utilised and may shortly exhaust possibilities of increasing supply via incremental additions to this capital base.

ACHIEVEMENTS

In 2008 the ACT Government announced *Your Health-Our Priority*, an overall health service redesign and infrastructure program for services to be implemented over ten years.

The Government committed \$300 million over four years in the 2008-09 Budget as the first tranche of *Your Health- Our Priority*. New announcements in the 2009-10 Budget valued at \$148 million related to E-Health, the Belconnen Enhanced Community Health Centre, the Walk-in-Centre at TCH, and the PET scanner, with combined computer tomography (PET/CT) represent the Government's commitment to subsequent phases of *Your Health-Our Priority*.

Capital approvals for health from the ACT Government and from the Commonwealth Government and current commitments to *Your Health-Our Priority* total over \$500 million covering 28 projects.

Your Health-Our Priority is a comprehensive, multifaceted asset development plan. It incorporates the total health system, including new models of care aimed at better management of chronic disease and keeping people out of hospital. It also includes better use of technology and different ways of providing care such as community based post-hospitalisation support, or other step-up and step-down facilities.

Workforce sustainability is another component of the program. Initiatives have been introduced that focus on new workforce roles and the expanded scope of practice for existing roles.

The program also incorporates the infrastructure needed to support these new approaches. This covers all public sector health services infrastructure including hospitals and community health centres.

The ACT's location in the region means its service population includes the neighbouring south-east region of NSW.

This means that Canberra's potential service population is close to 500,000 people. Consequently, it is estimated that approximately 25 per cent of our hospital services are provided to NSW residents, and 30 per cent of our elective surgery list is made up of NSW residents.

The ACT has cross border arrangements with NSW for health costs and also undertakes population health planning with the surrounding NSW health service providers. The service planning and activity projections that underpin *Your Health-Our Priority* are based on meeting the ACT population's future needs as well as the tertiary referral needs of surrounding NSW.

CALVARY HOSPITAL — NEW OPERATING THEATRES



In March 2009, a new operating theatre at Calvary Hospital was opened. Two further operating theatres were opened at Canberra Hospital in September 2009. The three new theatres allow for an additional 1,500 procedures to be undertaken each year to assist in relieving critical care capacity constraints in public operating theatres.

WALK-IN CENTRE



The new nurse-led Walk-in Centre at the Canberra Hospital opened in May 2010. The centre provides fast access to health advice and one-off health care for people in a convenient clinic environment. It is an alternative to attending an Emergency Department for treatment of a range of minor illnesses and injuries such as coughs, colds, cuts and sprains.

MENTAL HEALTH ASSESSMENT UNIT

The new Mental Health Assessment Unit at the Canberra Hospital opened in April 2010. It is a new service that provides a more appropriate mental health assessment and treatment environment in the hospital's emergency department.

WOMEN'S AND CHILDREN'S HOSPITAL



The new Women's and Children's Hospital will see the collocation of services including paediatrics at the Canberra Hospital, maternity services, the neonatal intensive care unit, gynaecology and foetal medicine and specialised outpatient services. Construction is underway and involves an extension to the existing maternity building.

COMMUNITY HEALTH CENTRES



As part of the overhaul and expansion of the Territory's health system, a range of works will commence construction in the second half of 2011, including:

- a new health centre in Gungahlin;
- an enhanced community health centre in Belconnen; and
- expanding and refurbishing the existing community health care facilities in Tuggeranong.



STRATEGIC INFRASTRUCTURE PRIORITIES HEALTH

	TWO YEARS	FIVE YEARS	TEN YEARS
 Continuing to meet the growth in demand for health services through extra capacity and by redesigning care delivery systems 	Women's and Children's Hospital Adult Acute Mental Health Inpatient Unit	Adolescent and Young Adult Mental Health Inpatient Unit	New acute clinical buildings for the Canberra Hospital Accommodation facilities Brian Hennessy Mental Health Rehabilitation Centre Expand bed capacity at the Calvary Hospital
 Providing locally based care that meets the needs of the community 	Gungahlin, Belconnen and Tuggeranong Community Health Centres	Phillip, Civic and Dickson Community Health Centres	A new Northside sub-acute hospital with enhanced role delineation between existing facilities
 Enhancing productivity achieved through better use of technology and innovative solutions, including different ways of providing care 	Ngunnawal Bush Healing Farm	Skills Development Centre	
• Implementing of a comprehensive capital asset development plan to build a sustainable and modern health system to ensure safety, availability and viability of quality health care in the ACT for now and into the future	Capital Region Cancer Centre Engineering infrastructure at the Canberra Hospital Refurbishment for clinical services expansion and decanting at the Canberra Hospital		

SUSTAINABLE



T EDUCATED & SKILLED

EXCELLENT EDUCATION, QUALITY TRAINING AND SKILLS DEVELOPMENT

The future of the ACT depends on a well-educated and highly skilled population, capable of delivering quality services and meeting the needs and aspirations of the community across all spheres.

The ACT Government's goal is to ensure that each individual has the opportunity to reach their potential and contribute to the community. To maintain high levels of *educational outcomes* across the community and grow this sector, the Government is planning strategic works to build twenty-first century learning environments. It has invested in infrastructure to ensure that:

- all Canberrans are able to reap the benefits of a high-quality education supported by a culture of excellence in teaching;
- lifelong learning opportunities are available to all; and
- the economy benefits from a skilled workforce adaptable to change and able to meet the diverse needs of the community.

POLICY PRIORITIES	STRATEGIC INFRASTRUCTURE PRIORITIES
 Implementing an integrated and comprehensive approach to school improvement Improving the transition for children from home to early childhood settings, and to school Increasing high school and college retention rates Undertaking high school and college sector reform and renewal Better integrating and coordinating secondary education and vocational training Improving teacher quality in ACT schools Creating schools that provide 21st century learning and teaching environments Developing the next generation of teaching and learning online, including through the delivery of a new Virtual Learning Environment Reducing greenhouse gas emissions and enhancing sustainability in schools 	 Developing quality school facilities to meet the needs of a growing city Targeting investment to meet need in areas of geographic priority Building 21st century learning and teaching environments Providing capacity to meet demand for and improve the transition from home to early childhood settings, and to early school years Developing an integrated management system for school staffing Creating and maintaining a safe and inclusive student learning environment Reducing greenhouse gas emissions from ACT Public Schools
 Improving continuing learning opportunities for all Canberrans Better coordinating and integrating community, educational and health services Providing flexible and responsive vocational training options Facilitating effective student learning through safe and inclusive environments 	 Facilitating integrated secondary education and vocational training Providing for flexible and responsive vocational training options
 Increasing workforce participation rates Increasing skills of the workforce Developing Canberra as Australias learning capital and an international education city 	 Developing online capability in education systems Providing appropriate student accommodation options Investing in education and training facilities

EDUCATION AND TRAINING

The education and training sector is an important driver of economic and productivity growth in the Territory. Around 65 per cent of ACT public schools were constructed between 1960 and 1980, meaning that these schools are now between 30 and 50 years old. As a result, there is a need to respond to the ageing asset profile of these schools.

Other priorities include the development of compact, efficient, adaptable and flexible infrastructure that supports contemporary learning practices, as well as providing a strong public school system sought after by parents.

During 2010, the ACT Government initiated a Tertiary Taskforce to investigate options and identify opportunities to optimise Territory investment in the tertiary education sector. The initiative aims to identify actions to promote education further as a major business sector for the ACT.

GOVERNANCE

The Education and Training Directorate has primary responsibility for driving policy in this sector. Reflecting the significance of education to the ACT's economy, from time to time, the Business and Industry Development area within the Economic Development Directorate facilitates partnership opportunities with this sector.

CURRENT STATE OF INFRASTRUCTURE

The Government owns and operates 84 public schools including:

- five early childhood schools catering for children from birth to eight years;
- forty-nine primary schools providing education for preschool to Year 6;
- seven combined schools for preschool/kindergarten to Year 10;
- ten high schools for Years 7 to 10;
- eight colleges for Years 11 and 12;
- one secondary school catering for Years 7 to 12; and
- four special education schools.

The Infrastructure Plan identifies opportunities to respond to the ageing asset profile of these schools through initiatives that address non-compliance, safety and security risks and other service areas that need to be brought up to current standards.

KEY DRIVERS OF DEMAND

The objectives to increase high school and college participation rates in the ACT public education system and create schools that provide 21st century learning and teaching environments have implications for infrastructure requirements. Changing curriculum and teaching practices may require high schools and colleges to be retrofitted, refurbished or replaced.

In addition to our high schools and colleges, a number of our older primary schools may require major refurbishment over the next ten years to respond to the demand for new learning and teaching environments and to address the aged condition of schools. Improvements to meet the Government's environmental objectives are also required and will support curriculum as well as energy and water management outcomes.

Our schools are central to our communities. New facilities delivered under the *Building the Education Revolution* initiative are available for community use. Over the next ten years, the Government will pursue the aim of making schools genuine community use facilities, including the incorporation of child and family services, sporting and recreational pursuits through the construction of gymnasiums and artificial sports fields and joint community/school libraries.

The Government will also continue to deliver new schools and expand existing schools where they are needed to address demand for educational services.

The key drivers of demand for educational services are:

- the timing and growth of new suburbs in the townships of Gungahlin and Molonglo;
- the location and timing of urban infill areas;
- the Government's directions in response to the *High Schools and Colleges* review;
- the impact of the ACT Government's 'Learn or Earn' policy on student retention rates;
- cross-border service demands;
- meeting the requirements of students with special needs;
- ensuring that school environments respond to the ACT Government's climate change policies; and
- enhancing school learning and teaching environments to deliver 21st century educational models.



ACHIEVEMENTS

The Government is maintaining its investment in educational infrastructure. Recent achievements include:

- The Gungahlin College for Years 11 and 12 opened in 2011. The College includes a joint college and library, CIT learning centre, performing arts theatre and gymnasium.
- The Kingsford Smith School (preschool to Year 10) opened in 2009 and the new Namadgi School (preschool to Year 10) opened in 2011.
- The Harrison Primary School opened in 2008. A secondary school is also under construction and is scheduled for completion in 2012.
- Early childhood schools were opened in Scullin, Narrabundah, Lyons and Isabella Plains in 2009. Design work is also underway for a further school to be constructed in Franklin.
- Design work has commenced for new primary schools in Bonner and Coombs.
- New performing arts centres have been opened at Lyneham High School and Calwell High School. Another performing arts theatre will be built at Canberra College.
- New gymnasiums at Belconnen and Stromlo High Schools opened in 2010.
- Refurbishment and maintenance activity is ongoing, including the expansion of the Red Hill School and refurbishment of Torrens Primary School. The five-year Schools Infrastructure Refurbishment program is nearing completion.

The ACT Government, in partnership with the Commonwealth Government, delivered \$150 million in ACT public school projects as part of the *Building the Education Revolution* National Partnership Agreement. These works included new and refurbished libraries, school halls, multipurpose buildings and classrooms at primary schools.



ELECTROTECHNOLOGY PROGRAM RELOCATION



The purpose-built electrotechnology training facility at CIT's Fyshwick Trade Skills Centre provides up-todate training accommodation and equipment for fast developing trades. The ACT Government provided \$9.943 million in funding for the new facility, which was completed in January 2011.

This new facility provides CIT's electrotechnology students with access to the wide range of equipment and related trades with a particular focus on green technologies and industry partnerships.

STRATEGIC INFRASTRUCTURE PRIORITIES EARLY CHILDHOOD AND SCHOOLS

	TWO YEARS	FIVE YEARS	TEN YEARS
 Developing and maintaining quality school facilities to meet the needs of a growing city, targeting investment to meet needs in areas of geographic priority 	Design and construction of a new school in Bonner Design for a new school in Coombs Design and construction of a new early childhood school in Franklin Delivering universal access to preschools in accordance with the COAG agreement Expansion of Macgregor and Majura Primary Schools Construction of the Harrison Secondary School including a second gymnasium court Improvements at Red Hill School Major refurbishments at Torrens and Hughes Primary Schools Construction of a new Performing Arts Theatre at Canberra College	Construction of new schools in Kenny and Moncrieff in Gungahlin Construction of a new school in Coombs Retrofit, refurbish and improve the learning and teaching environments at priority high schools and colleges Feasibility and design for new schools at East Lake, Gungahlin and Molonglo	Construction and expansion of schools to respond to growth, which could include in East Lake, Gungahlin and Molonglo Retrofit, refurbish and improve the learning and teaching environments at further high schools and colleges Commence redevelopment or replacement of older schools at the end of their functional life
Creating and maintaining a safe and inclusive student learning environment	Hydrotherapy pool upgrade at Malkara School Design of a new facility to support the Canberra College Cares Program Improve landscapes at selected schools Installation of security fences at priority schools Upgrade of emergency lighting and fire safety systems at ACT public schools Carpark and traffic safety improvements at priority schools Installation of artificial grass playgrounds at four priority schools — Calwell, Torrens and Weetangera Primary Schools, and Telopea Park School Improving the functionality and performance of facilities at priority schools, through roof replacement, student toilet upgrades and removal of hazardous building materials	Remove hazardous materials from priority schools Construction of new facilities for the CC Cares Program at Canberra College Install security fences at all remaining ACT public schools Continue the upgrade of carparks and traffic safety program at priority schools Maintain and improve the amenity at priority schools Major refurbishments at older primary schools Improve landscapes at further selected schools Upgrade electronic security systems at schools Remove underground fuel tanks at ACT public schools Installation of artificial grass playfields at a further six priority schools	New special education schools to meet demand Completion of the window and balustrade replacement programs Continue to improve the functionality and performance of facilities at priority older public schools Continue to upgrade carparks and improve traffic safety Continue to maintain and improve the amenity at priority schools Continue the installation and upgrade of lifts at priority multi-storey schools

		Installation and upgrade of lifts at priority multi- storey schools Replace windows in older ACT public schools and replace balustrades, to meet current Australian Standards	
 Reducing greenhouse gas emissions from ACT public schools 	Installation of solar power generating systems at ACT public schools Installation of rain water tanks at ACT public schools	Implement innovative environmentally sustainable design initiatives to achieve carbon neutrality	Completion of a program of initiatives to achieve carbon neutral schools Complete innovative environmentally sustainable design initiatives to achieve carbon neutrality
Building 21st century learning and teaching environments	New online enrolment system Design of a School Staffing Integrated Management System	Improve the functionality and performance of school facilities Upgrade school administration areas and modernise school libraries Construction of specialist environmental centres and language learning centres at public schools across the ACT	Completion of the school administration upgrade and library modernisation programs
VOCATIONAL EDUCATIO	ON AND TRAINING		
 Facilitating integrated secondary education and vocational training 	Design and commence construction of Trade Training Centres at selected high school and college sites	Construction of Trade Training Centres at selected high school and college sites	
 Providing for flexible and responsive vocational training options 	Tuggeranong Learning Centre design Formulation of master plan for CIT Fyshwick Trade Skills Centre	Construction of new CIT Learning Centre at Tuggeranong Multi-purpose building to replace Block E, Fyshwick Trade Skills Centre	Explore CIT Learning Centres at Molonglo and East Lake
GROWING THE EDUCAT	ION SECTOR		
 Developing online capability in education systems 	Year 12 Certification – Phase 3 Increase capability for online learning through ICT delivery methods ICT redundancy capability and network upgrades to support future online learning		
 Investing in education and training facilities 	CIT Asset Studies in respect to Utilisation Condition Asset Valuation Upgrades of general purpose learning spaces CIT Reid Campus environmental and water upgrade	Develop student accommodation facilities at CIT's Reid campus	Redevelopment of Block B, Reid Campus Redevelopment of Creative Arts Precinct, Blocks L,G and F Redevelopment of Southside Campus infrastructure



A PROSPEROUS ACT

A prosperous ACT requires considered development of industries, including exploring opportunities to diversify the economy through supporting the tourism, sport and recreation, science and technology, and innovation industries.

The ACT economy has been growing strongly over the past four years. This reflects the Government's commitment to prudent fiscal management and the steps it has taken to increase the Territory's economic resilience. The objective of this work has been to secure the economic future of Canberrans for years to come. The Canberra Plan sets out the goals of:

- ensuring that a strong, dynamic, resilient and diverse economy meets the needs of the Canberra community now and into the future;
- maintaining economic growth that promotes a fully sustainable city; and
- promoting the ACT as an economic hub for the Australian Capital Region.

POLICY PRIORITIES	STRATEGIC INFRASTRUCTURE PRIORITIES	
 Developing and implementing enterprise and industry sector strategies and programs Managing business programs that support industry development, trade and investment activities and skilled and business migration Creating an environment conducive to business sustainability, investment and growth Developing a green economy 	 Co-investing with industry and the Commonwealth to develop facilities for emerging industry Investing in projects that enhance the economic productivity of the ACT Strengthening industry liaison capacity to ensure greater responsiveness to changing skill requirements and business needs Collaborating with industry and the community to develop ecologically friendly infrastructure and business opportunities 	
 Increasing the economic return from domestic and international tourism Showcasing Canberra's attractions as part of the Centenary of Canberra celebrations 	 Developing and maintaining key sites and attractions across the Territory Supporting industry development through maintaining and enhancing the amenity, accessibility and appearance of the city and surrounds Providing appropriate facilities, venues and stadia to host events 	

TOURISM, SPORT AND RECREATION

Tourism is an important sector for the ACT economy, contributing around \$1.3 billion and employing 13,000 people. This economic contribution is the result of both domestic and international visitation.

Australian Capital Tourism leads the ACT and capital region tourism industry to create and implement a range of marketing and development programs that will significantly increase the economic return from domestic and international visitation.

Visitor infrastructure includes accommodation, transport and attractions, as well as the quality of our public spaces and facilities. While Australian Capital Tourism's role is to undertake destination marketing, infrastructure requirements are delivered by a variety of ACT and Commonwealth Government agencies as well as private enterprise.

As the nation's sporting capital, the ACT has the highest participation rates in the country. The population is serviced by a diverse sport and recreation industry, innovative commercial recreation providers and highquality facilities. Overall the sector's economic contribution was estimated to be \$245.2 million in 2008-09, providing just over 2,860 full time equivalent workers.

The sports industry provides additional flow-on benefits through the direct contribution of sport and recreation organisations; health benefits provided by physical activity; the benefits of sports-related tourism; and the contribution from retail spending related to sport and physical recreation. The provision of high-quality facilities underpins much of this activity and is a key area for further development as the population of Canberra continues to grow.

The infrastructure needs of the sport and recreation industry are prominently reflected in ACTIVE 2020 (released in April 2011), which is a long-term strategic plan for sport and active recreation in the ACT and region. It provides a blueprint upon which sport and recreation will be nurtured and promoted over the period 2011–2020. The plan highlights and promotes partnerships between industry and government and investment in long-term sustainable outcomes.

The ACT Government also manages Manuka Oval, Canberra Stadium and Stromlo Forest Park and promotes them as Canberra's leading sporting venues. Detailed master plans have been prepared for all three venues and these will used to guide development and growth of the facilities into the future.

Territory Venues and Events is also responsible for delivery of the \$8 million ACT Motorsport Fund. The purpose of the Fund is to invest in the future of community motorsport in the Territory. The ACT Motorsport Strategy was prepared in 2009 to assist the provision of investment into key areas of the sector.

GOVERNANCE

Sport and Recreation Services, Territory Venues and Events and Australian Capital Tourism are situated in the Economic Development Directorate.

CURRENT STATE OF INFRASTRUCTURE

The ACT Government has an important role in promoting attractions and events to encourage tourism in the Territory, and invests in infrastructure to support this activity. This includes capital works and investment in information and communication technology to build awareness and promote the Territory as a national and international destination.

The Government is working with the National Capital Authority to upgrade Commonwealth Park to better facilitate the staging of Floriade.

Sport and Recreation Services has an asset base of 431 hectares of sportsgrounds, with approximately 259 hectares currently irrigated to service the needs of the ACT sports industry and the general community.

Sport and Recreation Services directly owns and has management responsibility for four aquatic facilities (Canberra Olympic Pool, Lakeside Leisure Centre, Dickson Aquatic Centre and Manuka Swimming Pool).

The ACT Government owns Manuka Oval and Stromlo Forest Park. Canberra Stadium is leased to the Territory by the Commonwealth Government. Future ownership arrangements are currently being considered by both parties. The ACT Government is also considering future redevelopment options for Manuka Oval and Canberra Stadium.

The ACT Government is also considering options for increasing investment into Stromlo Forest Park to deliver value-added services such as school excursion accommodation, improved recreational services and a potential gondola to connect with educational facilities being proposed by the ANU on the summit of Mount Stromlo.

KEY DRIVERS OF DEMAND

Key drivers of infrastructure demand in these sectors include:

- ensuring that infrastructure and facilities are sufficient to meet changing demand and population growth;
- maintenance of facilities to meet required standards; and
- developing and sustaining a global presence and reputation for quality events and venues through strategic investment







STRATEGIC INFRASTRUCTURE PRIORITIES TOURISM, SPORT AND RECREATION

	TWO YEARS	FIVE YEARS	TEN YEARS
 Designing and constructing facilities to meet the needs of the sport and recreation industry 	Completion of Lyneham Precinct redevelopment Gungahlin Leisure Centre Gungahlin Enclosed Oval Throsby District Playing Field and Multi Sport Complex Crace Community Recreation Irrigated Park Asset Management Plan for ACT Government Sportsgrounds Capital Upgrade Programs to maintain existing infrastructure (sportsgrounds and pools) Exploring the feasibility of accommodation and infrastructure to support the Space/Science Museum development	Redevelopment of Canberra Olympic Pool Stromlo Forest Park District Playing Fields Jacka District Playing Fields Taylor District Playing Fields Franklin Community Recreation Irrigated Park Casey Community Recreation Irrigated Park Capital Upgrade Programs to maintain existing infrastructure (sportsgrounds and pools)	Delivery of approximately \$0.5 billion (2011 to 2021) to replace and construct new infrastructure to meet the needs of the sport and recreation industry in the ACT Molonglo Aquatics/ Leisure Centre Capital Upgrade Programs to maintain existing infrastructure (sportsgrounds and pools)

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STRATEGIC INFRASTRUCTURE PRIORITIES TOURISM, SPORT AND RECREATION

 Developing and maintaining key sites and attractions across the Territory 	Develop service infrastructure at Stromlo Forest Park to support school excursion accommodation Develop detailed planning and investment strategies for the construction of a gondola to the summit of Mount Stromlo Construction of facilities and infrastructure at the National Arboretum Canberra	Construction of school excursion accommodation and adjacent commercial holiday park Construction of facilities and infrastructure at the National Arboretum Canberra	
 Providing appropriate facilities, venues and stadia to host events 	Consider the implementation of master plan options for Canberra Stadium, Manuka Oval and Stromlo Forest Park Undertake detailed planning and minor capital works to address priority upgrades Upgrades to Commonwealth Park to better facilitate Floriade	Host Asian Cup football matches in Canberra	
 Investing in community based motorsport in the ACT 	Assist community groups to maintain and grow their facilities through strategic grant funding Develop a recreational off-road motorcycle riding facility in the ACT	Final agreed implementation of the ACT Motorsport Strategy	
 Supporting industry development through maintaining and enhancing the amenity, accessibility and appearance of the city and surrounds 	Development and maintenance of existing and new Town and District Parks, open space, nature reserves and national parks Implement the Play Space Strategy		



SCIENCE, TECHNOLOGY AND INNOVATION

The ACT Government continues to engage with industry and entrepreneurs to support innovation and build a more diverse economy. While the Government's role is generally to facilitate and enable engagement at both national and global levels, it also seeks periodic opportunities for co-funding of infrastructure to support the development of science, technology and business innovation.

The Government also advances the development of this sector through a range of innovative and strategic investments to deliver desired policy outcomes across the spectrum of its functions. Harnessing these scientific and technological advances also offers opportunities to enhance economic productivity and improve the efficiency and effectiveness of service delivery. Investments in this area vary from bricks and mortar works to information and communication technology. Recent examples of this program of work include:

- the progression of the nation-leading E-Health strategy;
- continued focus on eco-friendly development through the ACT Green Business Development Strategy;
- supporting the rollout of electric vehicles in the Territory;
- developing sustainable and environmentally friendly infrastructure reflecting contemporary best practice; and
- continued partnership with industry and the education sector to support economic diversity.

OPPORTUNITIES

E-Health Future

A range of state of the art information and E-Health technologies will enhance the delivery of health care services by improving community access to information. This project will integrate the latest medication equipment, increasing the efficiency of support services, and implement new systems such as electronic medical records, electronic referrals and electronic medication management to name just a few. Future E-Health projects will ensure that all health care facilities in the ACT are able to adapt to advances in digital technology.

ACT Green Business Development Strategy

Green business development programs or initiatives encourage attraction, retention and growth of companies offering products or services that directly or indirectly reduce their impact on the environment. The Strategy's broad action themes are to:

- support the growth of existing environmental businesses;
- enhance and leverage partnerships with academia, associations, government and business;
- market the 'Canberra Advantage';
- stimulate the growth of the green market;
- educate and expand the workforce to support the green economy; and
- allow Canberra to lead by example in this area.

The Green Business Development Strategy is about creating new high value jobs in a growing industry and stimulating environmental innovation across all businesses. In order to fully attain this vision and capitalise on the proven benefits of green economic development, the ACT is developing an action plan that:

- articulates where Canberra wants to be in this sector;
- describes the specific actions that must be implemented to get there;
- measures performance; and
- rewards and celebrates success.

STRATEGIC PARTNERSHIPS

ACT Government investment in research centres such as the Australian Plant Phenomics Facility, the ANU Climate Change Institute and National ICT Australia (NICTA) is part of a wider Government strategy to enhance Canberra as an innovation city and to strengthen the industry and business sector.

Other measures to encourage business and innovation include co-funding the Lighthouse Business Innovation Centre, the Innovation Connect small grants program, additional investment in the Canberra Business Development Fund, and a range of initiatives to facilitate innovation leadership and awareness across the business community.

The ACT Government also leverages funding opportunities from Commonwealth Government programs. It has engaged in partnerships to harness these opportunities as they arise. Examples of this approach are discussed on the following pages.

ELECTRIC VEHICLES

The ACT has been selected by global company *Better Place Australia* as a site for the roll out of electric vehicle support infrastructure. The infrastructure will include battery change and plug in facilities.

The ACT Government will provide planning and regulatory assistance to assist the rollout of this infrastructure. This initiative will see the ACT at the forefront of the shift to electric vehicles.

The ACT Government is also considering this transport option for inclusion in its fleet of vehicles. In making a final decision, it will consider the results of large scale trials being undertaken in Victoria and Western Australia.

PLANT PHENOMICS



The High Resolution Plants Phenomic Centre is a collaborative initiative between the CSIRO, ANU and industry groups and receives financial support from the ACT Government. The Centre uses the most recent advances in robotics, imaging and computing to build knowledge in and understanding of the effect that the genetic makeup of plants has in determining their functions and performance.

The initiative will help develop new and improved crops, healthier foods, more sustainable agricultural practices, and strategies to maintain and regenerate biodiversity.

As part of the Commonwealth Government's National Collaborative Research Infrastructure Strategy, the Phenomics Centre complements a sister facility at the University of Adelaide. These

facilities are national resources that produce technologies and tools available to any publicly funded researcher at a marginal cost and on the basis of merit.

The ACT Government's \$1.1 million investment in the High Resolution Plant Phenomics Centre is contributing significantly to raising Canberra's profile as a global centre of plant phenomics research. It has:

- supported post-doctoral research fellowships, travel bursaries and PhD top-up funding to attract outstanding students from around Australia;
- established education programs such as the facility's Outreach Program, which comprises a schools program, a teacher's information pack and the Artist in Residence bursary;
- led to the Gates' (Bill and Melinda) Foundation providing \$20 million to the Facility to bring international researchers to Canberra to find ways of increasing rice yields; and
- resulted in the US Departments of Agriculture and Energy bringing plants to Canberra to identify genes which are responsible for biofuel crop performance.

The Centre has produced opportunities for Canberra businesses, especially in the areas of digital imaging and computer science. It is also generating local economic benefits through the supply of specialist skills such as engineering, equipment-making and consulting services.



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THE NATIONAL INFORMATION AND COMMUNICATIONS TECHNOLOGY CENTRE FOR EXCELLENCE



National Information and Communications Technology Australia (NICTA) is the largest organisation in Australia dedicated to ICT research. This centre for excellence employs over 650 people including 544 researchers.

NICTA was established in 2002 with the support of the Commonwealth Department of Broadband, Communications and the Digital Economy and the Australian Research Council. It is a national organisation with five laboratories in four cities: Melbourne, Sydney, Canberra and Brisbane. NICTA's mission is to be an enduring world-class ICT research institute that generates national benefit through activities that focus on its people, research, education, linkages and commercialisation.

The ACT Government is a founding member of NICTA and has provided \$20 million. This funding contributed to the development of NICTA's Canberra

Research Laboratory (CRL) on London Circuit which was officially opened in December 2007. Further targeted opportunities to facilitate strong linkages with ACT industry, the commercialisation of research and embedding NICTA activities within the ACT innovation system will also be explored in the future.

The CRL has external research contracts to the value of \$2.5 million.

STRATEGIC INFRASTRUCTURE PRIORITIES SCIENCE,TECHNOLOGY AND INNOVATION				
Co-investing with industry and the Commonwealth to develop facilities for emerging industry	Ongoing initiatives including the ANU Climate Change Institute and the CSIRO Phenomics Project			
 Investing in projects that enhance the economic productivity of the ACT 	A financial feasibility study on the proposal to develop a general aviation airfield at Williamsdale Exploring opportunities to develop a dual carriage parkway between the Monaro and Federal Highways to transform the movement of freight along the north- south corridor			
• Strengthening industry liaison capacity to ensure greater responsiveness to changing skill requirements and business needs	Ongoing development of the <i>Canberra Construction Snapshot</i> Ongoing consultation and collaborative work with local business, industry and the community sector			
Collaborating with industry and the community to develop an ecologically friendly infrastructure and business opportunities	Continued reform of ACT Government procurement processes Facilitating the development of low-cost visitor accommodation			



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The Government's triple bottom line approach integrates strategies to maintain Canberra's social character, and safeguard its economic future, while protecting our natural and built environments and reducing our carbon emissions. Designing infrastructure that supports low-carbon energy supply, enhances water security and maintains our natural assets is central to creating a sustainable city.

The Canberra Plan sets out objectives of:

- establishing Canberra as a sustainable city;
- maintaining and protecting Canberra's natural assets; and
- ensuring the city is well placed to respond to the challenges of climate change.

POLICY PRIORITIES	STRATEGIC INFRASTRUCTURE PRIORITIES	
 Implementing policies and programs to reduce demand for water Developing a new waste strategy Reviewing the ACT Government s air quality strategies and programs 	 Progressing major water security projects Increasing the use of non-potable water Modifying selected stormwater systems Supporting regional and community partners working towards developing a sustainable city and region 	
 Maintaining and promoting continual improvements in environment protection Transitioning the ACT towards zero net emissions by 2060 Taking forward an energy reform agenda at the Territory and national level Releasing the ACT Sustainable Energy Policy 	 Enhancing our built and natural environment as part of the sustainable development of the ACT Exploring low emission and renewable energy options Investigating the development of major solar power capacity in the ACT 	





ENERGY

The Australian economy will continue to be dependent for some time on non-renewable fossil fuel sources such as petroleum, coal and natural gas. For example, over 90 per cent of the current national electricity generation depends on non-renewable fossil fuel sources. While we will continue to rely on fossil fuel based energy, dependence on non-renewable sources needs to be reduced as quickly as possible.

Responding to the climate change challenge, the ACT Government has adopted greenhouse gas reduction targets through the *Climate Change and Greenhouse Gas Reduction Act 2010.* Targets include:

- zero net greenhouse gas emissions by 2060;
- a 40 per cent reduction on 1990 greenhouse gas emission levels by 2020 or an equivalent of 1.915 million tonnes of greenhouse gas emissions in 2020;
- an 80 per cent reduction by 2050 or an equivalent of 638,000 tonnes of greenhouse gas emissions in 2050; and
- average *per capita* greenhouse gas emissions to peak by 2013.

Achieving these targets will require the Territory to reduce its greenhouse gas emissions to the maximum extent possible and offset any residual emissions.

In 2011, the ACT Government will release its first Sustainable Energy Policy which will provide an integrated framework for energy policy.

Policies relevant to energy infrastructure planning in the Territory include:

- introducing new energy efficiency measures to reduce ACT greenhouse gas emissions and energy costs for households and businesses;
- deciding on smart metering of homes and small businesses to improve management of electricity network loads and encourage more efficient use of energy in the context of a review currently underway through the COAG;
- investigating the merits and feasibility of cleaner and more efficient energy generation, such as distributed generation;
- identifying opportunities to increase local renewable energy generation including considering the feasibility of solar generation and waste-to-energy conversion technology;
- supporting the introduction of electric vehicles; and
- making improvements to building and planning regulations and initiatives to encourage sustainable and energy efficient development.

GOVERNANCE

The Environment and Sustainability Directorate has a significant role to play in developing a more sustainable Canberra. The Directorate's role coordinates the development of policies associated with climate change, energy and energy efficiency.

CURRENT STATE OF INFRASTRUCTURE

The ACT Government is not directly involved in the provision of large scale energy services. Although technical regulation occurs at the State and Territory level, the industry is regulated at a national level. The ACT network is connected to the NSW transmission grid and has a reliable supply of electricity through the National Electricity Market.

The ACT currently has one connection to the National electricity grid at Yass. Construction of a second connection at Williamsdale is currently underway. This will provide further security of supply and ensure adequate capacity into the future. Key project elements are due to be completed by the middle of 2011, including the substation at Williamsdale. The new connection is due to become operational from 2012.

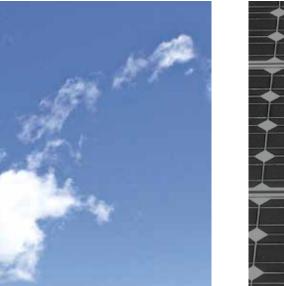
KEY DRIVERS OF DEMAND

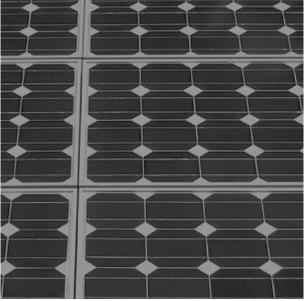
Electricity and gas are essential services underpinning all aspects of life in the ACT.

Federal and ACT Government carbon reduction measures will result in an increased market share for renewable and high-efficiency gas power generation over the next ten years, and a reduced share of more carbon-intensive coal-fired power generation. This has the potential to reduce the carbon intensity of grid supplied electricity and increase demand for low carbon and renewable energy project sites.

Increased use of residential air-conditioning, electrical appliances and electric vehicles may increase peak loads. Growth in peak loads may require further investment in distribution networks.







STRATEGIC INFRASTRUCTURE PRIORITIES ENERGY

	TWO YEARS	FIVE YEARS	TEN YEARS
 Developing large-scale renewable energy and low-carbon distributed generation capacity in the ACT Enhancing the energy efficiency of our homes and buildings Further enhancing the reliability and security of energy supply systems 	Develop up to 40 MW of large-scale solar generation capacity in the ACT Implement a broad- based energy efficiency scheme Commission the second national electricity market connection point at Williamsdale	Incremental expansion of renewable energy and low-carbon distributed generation capacity in the ACT	Continue to enhance the sustainability of energy generation and use by taking advantage of emerging technologies

WATER

The prolonged drought from 2002 to 2009 was a catalyst for water planning but it was understood that a comprehensive water resource strategy is crucial for the ACT. In 2004, the ACT Government released *Think water, act water*, the ACT's overarching strategy for sustainable water resource management. The strategy was developed with extensive community consultation, input from a range of experts and collaboration with relevant government agencies. It takes a catchment perspective and focuses on the integration of stormwater, water supply and wastewater elements, to address key targets including:

- reducing per capita use of mains (drinking supply) water by 12 per cent by 2013, and 25 per cent by 2023;
- increasing wastewater reuse from 5 per cent to 20 per cent by 2013;
- ensuring the level of nutrients and sediments entering ACT waterways is no greater than from a well-managed rural landscape; and
- reducing the intensity and volume of urban stormwater flows to pre-development equivalents.

Over the next decade, securing a high-quality and safe water supply and treating wastewater to maintain quality water outflows from the ACT will be priorities for the ACT Government.

To meet this challenge it is essential that infrastructure and technology in this sector be assessed and thoroughly evaluated to ensure the development of contemporary and appropriate water quality and recycling systems. This includes identifying the need for major asset replacement for water infrastructure where required.

Project development and assessment of the provision of wetland ponds and trialling stormwater reticulation systems to reduce potable water consumption is underway. This initiative has the potential to contribute to the ACT's goal of reducing its potable water use for irrigation purposes by 1.5 to 3.0 gigalitres.

Three major water security projects to diversify and extend the ACT's water storage capacity and water availability are currently in progress by ACTEW. These are:

- the expansion of the Cotter Dam from 4 to 78 gigalitres capacity;
- the Murrumbidgee to Googong Water Transfer project, which entails pumping up to 30 gigalitres annually from the Murrumbidgee River, near Angle Crossing south of Canberra, via a pipeline to Burra Creek and into Googong Dam to supplement the ACT's water supply; and

• the Tantangara Transfer project, which involves the purchase and transfer of up to 20 gigalitres of water from access licences held in the NSW Regulated Murrumbidgee River to the ACT via storage in the Tantangara Reservoir in the upper Murrumbidgee River.

A review of *Think water, act water* is currently underway. The review will take into account recent local developments, and updated research and data from the last five years. It will also review external policies and factors including the National Water Initiative Agreement, COAG water reforms and the development of the Murray-Darling Basin Plan under the Commonwealth *Water Act 2007*.

Following the end of the drought and cessation of Temporary Water Restrictions, Permanent Water Conservation Measures are now in place to encourage and improve water use efficiency at a household level. The measures are currently being reviewed by ACTEW as part of continuous improvement in demand management and the aim will be to extend the scheme to the commercial sector.

GOVERNANCE

The Environment and Sustainable Development Directorate is responsible for the development and coordination of water policy.

ACTEW Corporation is responsible for the control, ownership and operation of water supply and sewerage systems within the ACT, and is owned by the ACT Government. ActewAGL, a joint venture, is responsible for the provision of water and wastewater services to ACTEW. Infrastructure planning is undertaken by ACTEW.

CURRENT STATE OF INFRASTRUCTURE

The ACT has four water supply dams with an overall capacity of 207.4 gigalitres, 46 reservoirs with a capacity of 917 gigalitres, 24 pumping stations and 3,096 kilometres of mains. The Territory also has 26 sewerage pumping stations and 3,094 kilometres of sewerage mains.

A review of the future direction of ACT sewerage services and systems has been undertaken to identify emerging issues and assess required upgrades and replacements. In 2011 ACTEW released the Canberra Sewerage Strategy. A future challenge will be supplying water and sewerage services to a larger population.

Other challenges include:

- climate change and the need to reduce greenhouse gas emissions;
- supplying treated effluent for landscape irrigation and other purposes;



A SUSTAINABLE ACT

- advanced technologies and regulatory changes; and
- affordability, sustainability and financial considerations.

KEY DRIVERS OF DEMAND

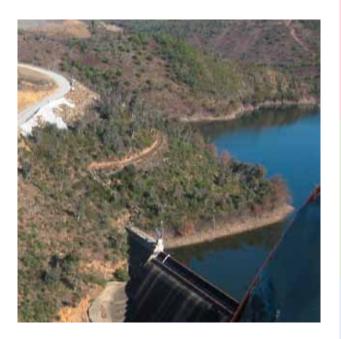
The availability of water is a critical limiting factor in the sustainable development of the city. It has a significant impact on the community and affects the look and feel of the city. Drivers of demand on infrastructure to supply and manage water include:

- intergovernmental commitments on water use, including the Murray-Darling Basin Agreement, the National Water Initiative, COAG Water Reform agreements, the Murray-Darling Basin Plan and the Canberra Integrated Urban Waterways Funding Deed;
- reducing potable water use for irrigation purposes;
- changing weather patterns and reductions in longterm average rainfall;
- meeting a target of a 25 per cent demand reduction by 2023, with a mid-term target of 13 per cent demand reduction by 2013, while meeting the needs of a growing city; and
- managing consumer costs for this scarce resource.

ACHIEVEMENTS

Projects completed since the 2010 Infrastructure Plan include:

- a major upgrade of the Googong Dam Spillway to repair erosion, provide protection against possible extreme flood events and protect downstream areas in Queanbeyan and Canberra, completed in 2010;
- completion of a larger pumping station in the Murrumbidgee River and improvements to the Cotter Pump Station including renewal of large supply mains. These works allow more water to be supplied from the Cotter Reservoir and Murrumbidgee River;
- construction of four new reservoirs, associated trunk mains and pumping stations to support development of new suburbs in Gungahlin;
- commencement of work to provide water and sewerage services to Uriarra Village, which is expected to be completed in 2011;
- sewerage system improvements, including the renewal of mains affected by tree roots and improvements to sewer ventilation to reduce corrosion and minimise nuisance odours;







- upgrade works to ensure treated water discharged from the plant continues to minimise the impact on the Murrumbidgee River system while catering for forecast population growth;
- construction of ponds in O'Connor, Mitchell, Lyneham and Dickson to improve water quality and capture stormwater for irrigation; and
- design of stormwater reticulation networks in the Inner North of Canberra, Weston Creek and Tuggeranong for construction in 2011-12.

STRATEGIC INFRASTRUCTURE PRIORITIES WATER

	TWO YEARS	FIVE YEARS	TEN YEARS
 Progressing major water security projects Increasing the use of non potable water Modifying selected stormwater systems 	 Planning infrastructure for the Molonglo River Corridor Preparing a plan of management for the Molonglo River Corridor Completing the Murrumbidgee to Googong Dam pump and pipeline transfer Constructing non-potable water reticulation systems in the Inner North, Weston Creek and Tuggeranong Completing the Enlarged Cotter Dam Finalising agreements with Snowy Hydro Limited and the NSW Government to allow the Tantangara water transfer Completing initial water and sewerage infrastructure in Molonglo 	Completing a new ACT Sewerage Strategy and Investment Program Investigating the refurbishment and upgrade of the Fyshwick Sewage Treatment Plant and upgrade of the Lower Molonglo Water Quality Control Centre Consideration of the need for new water quality ponds in Molonglo and Gungahlin	Securing a high-quality and safe water supply Maintaining water infrastructure assets Securing non-potable sources of water for irrigation of public sports grounds and private sporting facilities Meeting the city's environmental commitments Replacing major assets for water infrastructure



EDUCATED

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NATURAL ASSETS AND SUSTAINABILITY

Infrastructure investment is required to manage the Territory's parklands, which cover 235,824 hectares or 73 per cent of the ACT.

Included in this land area are one wilderness area, one national park, three major water catchments, 12 lakes and ponds and 33 sites that make up the Canberra Nature Park. In addition to parks and reserves the Territory also manages more than 728,000 trees.

GOVERNANCE

The Territory and Municipal Services Directorate is responsible for the planning and management of the majority of the ACT's parks, reserves, forestry plantations and public domains. The Environment and Sustainability Directorate also progresses the development of sustainability initiatives.

DICKSON AND LYNEHAM WETLANDS



The protection of water supplies and the natural environment are two of the Government's priorities. These priorities are being supported by the construction of a myriad of wetlands in urban Canberra. These wetlands provide a range of benefits, such as:

CURRENT STATE OF INFRASTRUCTURE

or rebuilt assets after the 2003 fires

Examples of these works follow.

ACHIEVEMENTS

Many of Canberra's trees date from the construction of suburbs and those in older suburbs are approaching

replacement age. A significant percentage of the assets

within reserve and forest areas were replaced with new

The Government has engaged in a range of works to

support the sustainable use of land in the Territory.

- restoration of concrete channels to living systems;
- improved water quality by reducing excess nutrients and suspended solids;
- improved flood protection by detaining water and releasing it slowly;
- creation of aquatic habitat planted wetlands attract water birds, frogs, turtles, water bugs and yabbies;
- provision of opportunities for 'natural' recreational experiences in our suburbs;
- developing educational and volunteering opportunities for the community;
- replacement of drinking water with harvested stormwater for irrigation of local sports grounds and school grounds; and
- increased values of surrounding properties.

Completed wetlands include:

- Banksia Street, O'Connor Wetland, built in 2010; and
- Flemington Road Ponds 1 and 2, Mitchell, built in 2009.

The Environment and Sustainability Directorate is now developing wetlands in Hawdon Street, Dickson and Goodwin Street, Lyneham. Work will be commencing shortly at the Valley Ponds Gungahlin site.

ANU CLIMATE CHANGE INSTITUTE



The ACT Government provided a grant of \$2.5 million to assist with the establishment of a Climate Change Institute at the ANU.

The Institute will work with governments, the private sector and civil society to develop innovative, interdisciplinary approaches to address climate change.

As part of the grant, the ANU provides the Territory with written reports every six months. The reports detail progress towards delivering the outcomes of the funded activity and a financial statement of the expenditure. This approach ensures collaboration and partnership, not merely finance for a new building.

There are seven work items including pursuing collaboration opportunities with other research

organisations and collaboration with the Territory on implementing the climate change strategy, Weathering the Change.

The Environment and Sustainability Directorate is also represented on monthly project control group meetings.

STRATEGIC INFRASTRUCTURE PRIORITIES NATURAL ASSETS

	TWO YEARS	FIVE YEARS	TEN YEARS
 Supporting regional and community partners working towards developing a sustainable city and region 	Continuing to support the Canberra and South East Region Environment Centre		
• Enhancing our built and natural environment as part of the sustainable development of the ACT	Jerrabomberra Wetlands Improvements Urban forest rejuvenation Development of Mulligan's Flat Reserve Establishing a new park at the Weston Arboretum	Plan of management for Canberra Nature Park and Murrumbidgee River Corridor and associated concept/master plans for high-use reserves	Consider implementation of the infrastructure development required for Bush Fire Management Investigate the need to redevelop the Tidbinbilla Nature Reserve Assess the need for enhancements to recreational infrastructure at Jerrabomberra Wetlands in keeping with Master Plan



 Implementing waste reduction and reuse strategies 		Development of waste facilities and technologies enabling the recovery and processing of organic waste from the commercial and domestic sectors	
 Progressing major water security projects 	Completion of the Enlarged Cotter Dam Completion of the Murrumbidgee to Googong Dam pump and pipeline transfer		Secure a sustainable, high-quality and safe water supply
 Maintaining a high level of wastewater treatment to protect downstream water quality 	Maintaining water and wastewater infrastructure assets		
 Increasing the use of non- potable water 	North Weston/Molonglo Stormwater Harvesting Scheme		
 Modifying selected stormwater systems 	Gungahlin – The Valley Ponds and Stormwater Harvesting Scheme Water Efficiency Improvements for Bus Wash Facilities		
• Exploring the merits of the Feed-in-Tariff Scheme		Exploring cleaner and more efficient energy generation, such as distributed generation, for its potential contribution to reducing ACT greenhouse gas emissions	
 Assessing the feasibility of major solar power capacity in the ACT 	Commence work on proposed solar power facilities equal to 20-40 MW installed capacity	Consider incremental expansion of proposed solar power facilities	Explore the feasibility of medium to large scale solar facilities in the ACT



DELIVERING THE PLAN

The Infrastructure Planning and Delivery: Best Practice Case Studies, developed through the COAG Infrastructure Working Group, highlights the high priority governments across Australia are giving to improving infrastructure delivery.

The ACT Government is working towards significant improvements in this area in both internal operations and in its interactions with industry. This includes innovation in procurement processes and development of consultative forums such as industry reference groups and roundtables.

PARTICIPATION, PEOPLE AND PRODUCTIVITY

The high-quality of infrastructure in the ACT complements its well-educated and highly skilled workforce. Together, these strengths have been important drivers of the ACT's economic growth.

Along with higher levels of education, technological change and private capital expenditure, public infrastructure has played an important part in driving these productivity improvements. Infrastructure is an economic driver both directly and indirectly.

While the Government's primary imperative for infrastructure investment is to support services, these investments also have an impact on productivity and diversity in the Territory's economy. The injections of unprecedented investments into new infrastructure by the ACT and Australian Governments over the last three years has been critical in ensuring adequate short-term economic stimulus to shelter the economy from the impacts of the Global Financial Crisis. Infrastructure investment is likely to remain an important way of increasing the ACT's productive capacity.

The scope of investment opportunity will be determined, in large part, by changing knowledge and technology. This, however, will present a challenge. While changing technology, properly harnessed, drives economic growth, it also increases demand for new and higher-quality public services and assets, particularly in health. The challenge will be to strike the right balance between infrastructure investment that increases the ACT's productive capacity (and thereby our material wellbeing and ability to pay for other services and assets), and infrastructure investment that addresses other dimensions of wellbeing.

We are also continuing to reform our procurement systems and processes with the aim of making it easier for industry to do business with the ACT Government, while keeping the system robust and accountable. Reforms include regularly publishing a Call Tender Schedule, greater use of internet-based tendering, and reviews of the ACT Government Pregualification System and the template contract documents used for tendering. The Government also continues to meet regularly with industry bodies to inform industry of developments in the Government's capital delivery program, listen to industry concerns and work on ways for Government to address them and to support an environment of open and transparent processes. The ACT Government recognises its responsibility as the lead planner, co-ordinator and provider of public infrastructure to support economic growth in the ACT. However, due to the microeconomic reforms of the last 20 years, the private sector is able to play a larger role in infrastructure provision. The ACT Government will continue to examine the best ways to combine private and public involvement in capital projects to ensure optimal investment, the best value for taxpayers and appropriate risk-sharing.

QUALITY DESIGN AND URBAN FORM

Canberra is recognised internationally as one of the world's great planned cities. The Griffin Plan established Canberra as a 'Garden City' with an urban amenity of the highest order. However, the low density of Canberra's urban form has created significant challenges. The ACT is now seeking to address these challenges by establishing a more compact, low carbon emission city while also addressing community expectations.

Exemplary design is not easily incorporated into planning systems, particularly at the development assessment level, because the analysis of the design of individual development proposals can be very subjective and does not lend itself well to prescriptive measures. On the other hand, the trend to rule-based or codebased assessment has the potential to lead to mediocrity in design by encouraging an approach based on the lowest common denominator.

This can weaken the case for higher density and infill development, particularly when there may be limited community support for such development, further eroded in the face of poor design outcomes.

Feedback from the community and industry consultation has underscored the need for an effective city planning system that facilitates good development outcomes. This will be achieved through:

- providing an environment that is conducive to design excellence, through principles such as those that might be found in an urban design protocol or within master plans for defined locations;
- leadership, particularly by public sector projects and incentives; and
- rewarding best practice within the private sector.

EFFECTIVE IMPLEMENTATION

The ACT Government's strategic planning system is effective because it takes an integrated view of the entire management cycle; not just planning, but delivery, reporting and evaluation. This breadth supports clarity of direction, coordinated and effective implementation, transparent governance and performance reporting, and a focus on continuous improvement.

In 2010 the inaugural *Canberra Construction Snapshot* was released. The Snapshot was developed to promote the ACT and region as a good place to do business and provides up-to-date information of continuing and planned capital works and construction activities. It also highlights the work undertaken by large multinational companies as well as local companies and subcontractors.

The most recent Snapshot covers the period from September 2010 to March 2011. It identifies spending in the building and construction sector in the order of \$1.3 billion. This is an increase of \$100 million on the past result, suggesting strength in this sector despite nationwide skills constraints.

The ACT Government has implemented a range of reforms over recent years to facilitate growing annual capital works programs. These reforms have included addressing issues such as project documentation, improving project management skills and resourcing and enhancing industry consultation.

One important part of this has been streamlining documentation and procurement processes, which are scheduled to be put into effect in 2011-12. Other key actions include:

- ACT Government participation in the National Prequalification System, including for contractors for civil (roads and buildings) contracts, and for nonresidential building contracts;
- ACT Government participation in an interjurisdictional working group to develop a nationally consistent set of contract principles for construction projects; and
- continuing to update the Call Tender Schedule.

The ACT Government is reviewing the standards which apply to the construction of urban infrastructure, including streetlights, stormwater and roads. This will benefit the ACT by bringing Territory standards into line with national procedures, removing barriers to interstate operators. In 2011-12, the ACT Government will also implement an enhanced and more systematic approach to value management and reviewing the progress of individual projects. This will ensure each project is delivered in the most efficient and effective way possible.



SUPPORTING INNOVATION

The ACT has set high standards for the design and functionality of its urban form and architecture. The ACT is the first jurisdiction to introduce 6 star energy ratings for private housing. In 2010, an ACT Government Architect was appointed to advise the Government, inspire industry and generate a desire for excellence in the ACT.

The Government continues to evolve its planning processes to support the development of quality design and architecture in Canberra.







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2011-12 BUDGET INITIATIVES

The 2011-12 Budget provides for new investments in infrastructure of \$884.9 million over four years. This includes New Capital Works including feasibility and forward design (\$838.6 million) and Capital Upgrades (\$46.3 million).

The value of works in progress flowing from previous years is almost \$860 million over four years, with \$605.1 million available for expenditure in 2011-12. The total Infrastructure Investment Program over four years is \$1.785 billion.

The 2011-12 Infrastructure Investment Program includes a significant increase in new works investment over 2010-11. These new investments are made as the substantial works in progress associated with the 2008-09 *Building the Future* Program and the *Nation Building and Jobs Plan* reach their conclusion.

Significant infrastructure investment commitments made in the 2011-12 Budget include:

- Government Office Building (\$432.2 million);
- Transport for Canberra Majura Parkway (\$144.0 million);
- Bonner Primary School (\$60.3 million);
- Franklin Early Childhood School (\$42.7 million);
- Enhancing Hospital Facilities (\$41.0 million);
- John Gorton Drive Extension to Molonglo 2 and Group Centre (\$34.0 million);
- Gungahlin Pool (\$26.3 million);
- Horse Park Drive Extension to Moncrieff Group Centre (\$24.0 million);
- Integrated Cancer Centre Phase 2 (\$15.1 million);
- Expansion of Social Housing (\$9.4 million);
- Upgrade of Early Childhood Facilities (\$9.0 million);
- Holder Early Childhood Centre (\$7.5 million);
- Namadgi P-10 School Pedestrian Bridge (\$6.0 million); and
- North side Hospital Specification and Documentation (\$4.0 million).

INITIATIVES – CAPITAL WORKS	2011-12	2012-13	2013-14	2014-15	
	\$′000	\$′000	\$′000	\$′000	
CHIEF MINISTER'S DIRECTORATE					
Glassworks and Other Arts Facilities – Fire Systems Improvements	1,200	200	0	0	
Street Theatre Extension	1,280	1,900	0	0	
Strathnairn Facility Improvements	400	100	0	0	
Tuggeranong Arts Centre Improvements (Design)	200	0	0	0	
TERRITORY AND MUNICIPAL SERVICES DIR	ECTORATE				
Transport for Canberra – Majura Parkway	0	50,000	60,000	34,000	
Transport for Canberra – Walking and Cycling Infrastructure	1,500	0	0	0	
Transport for Canberra – City Path Lighting	100	100	100	100	
Transport for Canberra – Bus Stop Upgrades to Disability Standards	1,000	0	0	0	
Transport for Canberra – Bus Priority at Gundaroo Drive/Barton Highway (Feasibility)	150	0	0	0	
Transport for Canberra – Barton Bus Station (Design)	150	0	0	0	
Transport for Canberra – Freeway Bus Stops on Adelaide Avenue Transit Lane (Feasibility)	200	0	0	0	
Transport for Canberra – City Area Bus Layover Facility (Design)	1,000	0	0	0	
Transport for Canberra – Northbourne Avenue Transitway (Design)	2,500	0	0	0	
Transport for Canberra – Woden Bus Depot Upgrade	1,243	576	1,306	541	
Transport for Canberra – Bridge Strengthening on Commercial Routes	1,000	0	0	0	
Transport for Canberra – Bridge Safety Fences	600	0	0	0	
Transport for Canberra – West Belconnen Intersection Upgrades	1,500	0	0	0	
Transport for Canberra – Public Transport Infrastructure	500	500	500	500	
Transport for Canberra – Dickson Major Bus Station (Design)	300	0	0	0	
Namadgi P-10 School – Pedestrian Bridge	6,000	0	0	0	



INITIATIVES – CAPITAL WORKS	2011-12	2012-13	2013-14	2014-15
Fyshwick Stormwater Augmentation – Stage 2	2,600	0	0	0
Deakin Stormwater Augmentation – Stage 1	1,500	0	0	0
Centenary Trail	1,700	1,400	200	0
Molonglo Riverside Park Planning (Design)	1,900	0	0	0
North Weston Pond and Bridge (Additional Funding)	15,000	5,000	0	0
Eastern Valley Way – Stage 2 Inlet and Public Realm	3,400	1,120	0	0
Invasive Environmental Weed Control – Lake Burley Griffin	150	150	0	0
Restoration of Waterways and Surrounds	1,500	0	0	0
Shade Structures – Existing Playgrounds	400	0	0	0
Park Signs	100	0	0	0
Accessible Public Toilets	1,200	0	0	0
Street Level Recycling	165	0	0	0
ACTION – Fuel Facilities at Depots	2,540	1,843	0	0
Construction of Workshop Spaces – Hume Resource Recovery Estate	1,770	0	0	0
ACT New Landfill and Other Studies	2,750	0	0	0
West Belconnen Resource Management Centre Rehabilitation of Landfill Cells	550	600	600	800
Mugga Lane – Rehabilitation of Old Landfill Cells	700	800	800	800
Rehabilitation of Building Waste Recycling	1,000	0	0	0
ECONOMIC DEVELOPMENT DIRECTORATE				
Fitters' Workshop Kingston Foreshore	2,500	1,400	0	0
Canberra CBD Upgrade Stage 2 – Merry-go-round and Veterans' Park	1,800	2,500	0	0
Gold Creek Homestead Stabilisation	450	0	0	0
Ngunnawal Aged Care Land Release – Gold Creek	2,400	0	0	0
Government Office Building	500	1,000	21,539	101,825
National Arboretum Canberra (Commonwealth Contribution)	4,300	4,300	5,000	5,000

INITIATIVES – CAPITAL WORKS	2011-12	2012-13	2013-14	2014-15
Kingston Foreshore Parking (Design)	200	0	0	0
Narrabundah Long Stay Park – Symonston	5,000	0	0	0
Australia Forum	1,000	0	0	0
Molonglo 2 – Water Supply, Trunk Sewer and Stormwater Infrastructure (Stage 2) (Design)	500	500		
Horse Park Drive Extension from Burrumarra Avenue to Mirrabei Drive (Design)	400	200	0	0
The Valley Avenue Extension to Gundaroo Drive (Design)	200	200	0	0
Gungahlin Town Centre Roads (Design)	500	500	0	0
Woden Valley Stormwater Retardation Basins (Design)	200	200	0	0
Uriarra Road Upgrade (Design)	150	0	0	0
John Gorton Drive Extension to Molonglo 2 and Group Centre	10,000	24,000	0	0
Molonglo Leisure Centre (Feasibility)	200	0	0	0
Molonglo 2 – Water Supply, Trunk Sewer and Stormwater Infrastructure (Stage 1)	3,000	7,000	0	0
Horse Park Drive Extension to Moncrieff Group Centre	15,000	9,000	0	0
North Weston Road Intersection Reconstruction (Additional Funding)	1,000	3,000	0	0
Kenny Contamination Remediation	400	0	0	0
Restoration of Sportsgrounds – Isabella Plains and Charnwood	1,111	0	0	0
Manuka Oval Redevelopment (Design)	750	0	0	0
Stromlo Forest Park Planning and Infrastructure	800	2,000	0	0
Wright Outer Asset Protection Zone – Stromlo Forest Park	250	0	0	0
Stromlo Forest Park Soil Conservation Works	200	0	0	0
Motorsports Fund – Capital Improvements to Fairbairn (Design)	500	0	0	0
Gungahlin Pool	1,000	6,325	15,180	3,795



INITIATIVES – CAPITAL WORKS	2011-12	2012-13	2013-14	2014-15	
Supporting Our Local Sporting Clubs – Redevelopment of Kippax District Playing Fields	2,000	0	0	0	
Tuggeranong Multi-use Indoor Community Facility and Men's Shed	2,100	0	0	0	
Canberra Stadium Upgrade	1,000	1,200	0	0	
Upgrade to Commonwealth Park (Floriade)	983	0	0	0	
Gungahlin Office Accommodation (Feasibility)	150	0	0	0	
HEALTH DIRECTORATE					
Clinical Services Redevelopment – Phase 3	15,700	10,000	0	0	
Integrated Cancer Centre – Phase 2	3,021	8,415	3,666	0	
Enhancing Canberra Hospital Facilities (Design)	20,000	21,000	0	0	
Staging, Decanting and Continuity of Services	14,600	4,830	0	0	
Central Sterilising Services	1,760	15,510	0	0	
North Side Hospital Specification and Documentation	4,000	0	0	0	
Women and Children's Hospital (Additional Funding)	3,500	0	0	0	
JUSTICE AND COMMUNITY SAFETY DIRECTORATE					
Future Correctional Facility Requirements (Feasibility)	620	0	0	0	
Courts Security Upgrade	1,000	0	0	0	
ESA Station Upgrade and Relocation – Phase 1 Due Diligence (Design)	3,961	0	0	0	
Remedial Capital Improvements for ACT Policing Facilities	338	0	0	0	
SUSTAINABLE DEVELOPMENT DIRECTORAT	re				
Inner North Stormwater Reticulation Network	7,000	500	0	0	
ACT Government Resource Management Fund	2,000	0	0	0	
Heritage Signage and Interpretation	150	0	0	0	
Partial Reconstruction of Gudgenby Homestead and Acquisition of Historic Collections	230	0	0	0	
Molonglo – North-South Arterial Road Bridge and Pedestrian Bridge (Feasibility)	300	0	0	0	



INITIATIVES – CAPITAL WORKS	2011-12	2012-13	2013-14	2014-15
Molonglo Valley – Sewer Vent Odour Study (Feasibility)	250	0	0	0
East Lake – Gas Main Relocation near Monaro Highway (Feasibility)	100	0	0	0
Infill Development Infrastructure Studies (Feasibility)	1,000	500	0	0
Urban Development Sequence for Affordable Housing (Feasibility)	750	650	0	0
Kenny Planning and Design Framework and Kenny and Throsby Environmental Assessments (Feasibility)	900	0	0	0
Employment Land Planning and Implementation (Feasibility)	350	0	0	0
Molonglo Stage 2 – Suburbs 3 and 4 Environmental Impact Statement and Clearances (Feasibility)	450	300	0	0
EDUCATION AND TRAINING DIRECTORATE				
Bonner Primary School	7,670	33,600	19,000	0
Bonner Primary School Land Remediation	2,330	0	0	0
Franklin Early Childhood School	8,000	19,700	15,000	0
Gungahlin College, Namadgi P-10 School and Harrison Secondary School (Additional Funding)	9,200	0	0	0
COAG Universal Access to Preschools – Stage 1 Expansion Works	4,400	1,800	0	0
West Macgregor Development – Macgregor Primary School Expansion	1,000	4,650	0	0
North Watson Development – Majura Primary School Expansion	1,000	3,400	0	0
School Toilet Upgrade Program – Stage 1	1,000	1,000	0	0
Malkara School – Hydrotherapy Pool Refurbishment	1,830	0	0	0
Canberra College Cares (CC Cares) Program (Design)	750	650	0	0
Hazardous Materials Removal Program – Stage 2	1,700	1,700	0	0
School Roof Replacement Program – Stage 1	1,000	1,800	0	0
Fire Systems Upgrade Program	1,060	1,500	0	0
Installation of Artificial Grass Surfaces – Stage 1	300	2,000	0	0



INITIATIVES – CAPITAL WORKS	2011-12	2012-13	2013-14	2014-15	
COMMUNITY SERVICES DIRECTORATE					
Flynn Regional Community Hub	1,000	3,000	5	25	
Upgrade of Early Childhood Facilities	4,500	4,500	0	0	
Holt Preschool Refurbishment	500	0	0	0	
Holder Early Childhood Centre	5,000	2,500	0	0	
Bimberi Security Upgrade	1,555	0	0	0	
HOUSING ACT					
Expansion of Social Housing	9,446	0	0	0	
Expansion of Public Housing Energy Efficiency	2,000	2,000	2,000	2,000	
ACT PUBLIC CEMETERIES AUTHORITY					
New Southern Cemetery (Design)	727	0	0	0	
CANBERRA INSTITUTE OF TECHNOLOGY					
New CIT Tuggeranong Learning Centre (Design)	700	0	0	0	
Master Plan Fyshwick Trade Skills Centre (Feasibility)	180	0	0	0	
Asbestos Removal and Remediation at Watson Campus	815	0	0	0	
EXHIBITION PARK CORPORATION					
Toilet and Shower Block Upgrade	500	0	0	0	
Refurbishment to Budawang Pavilion	765	0	0	0	
TOTAL CAPITAL WORKS INITIATIVES	271,200	273,119	144,896	149,386	



