

Chapter 12 Construction

Key Points

- Construction of residential dwellings, commercial and industrial buildings, education and health facilities and infrastructure in the Northern Territory accounted for about 6.8 per cent of gross state product (GSP) in 2007-08.
- The construction industry is the fifth largest employer, with about 6100 people or about 7 per cent of the total workforce working in construction in 2007-08.
- Construction activity increased significantly from 2000-01, with an average of about \$2.2 billion a year spent between 2000-01 and 2007-08.
- Territory construction expenditure is estimated to increase by about 17.6 per cent in 2008-09 to \$2.3 billion, but forecast to decline by about 33 per cent to \$1.6 billion in 2009-10.
- Improved global economic conditions and increased energy demand are expected to support increased construction expenditure in the medium term, particularly due to development of natural gas reserves in the Timor Sea.

Background

Construction of residential dwellings, commercial and industrial buildings, education and health facilities and infrastructure in the Northern Territory accounted for about 6.8 per cent of gross state product (GSP) in 2007-08. The construction industry is the fifth largest component of Territory GSP, behind mining, property and business, ownership of dwellings and government and defence.

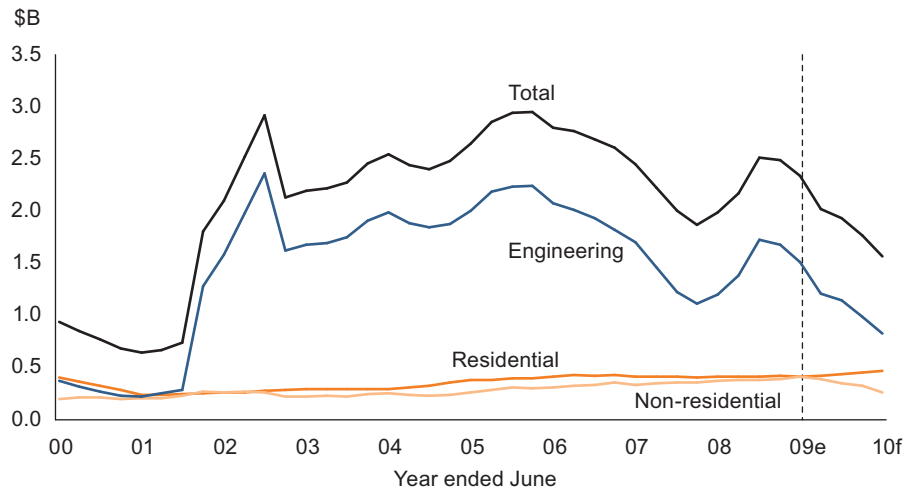
The construction industry is also the fifth largest employer, with about 6100 people (or 7 per cent of the total workforce) working in construction in 2007-08.

Expenditure and employment in the construction industry in the Territory fluctuates year to year, primarily due to the relatively significant investment and workforce associated with major engineering or infrastructure projects in a small economy.

For example, the level of construction activity since the start of this decade has closely followed the timing of major projects, including the \$1.3 billion Tarcoola to Darwin railway, constructed from June 2001 to January 2004; the \$2 billion Wickham Point liquefied natural gas (LNG) plant, constructed from June 2003 to December 2005; and the \$1 billion Darwin Convention Centre and Waterfront project, under construction since July 2007.

Construction activity increased significantly from 2000-01, with an average of about \$2.2 billion a year between 2000-01 and 2007-08, compared to an average of about \$891 million a year in the 1990s (Chart 12.1).

Chart 12.1: Territory Value of Construction Work Done (moving annual total)



e: estimate; f: forecast
 Source: ABS, Cat. No. 8752.0, Northern Territory Treasury

The value of construction work done declined from late 2005 to 2008, mainly because work ended on the series of high value major projects. However, the value of construction work done in 2008-09 is estimated to be \$2.3 billion, a 17.6 per cent increase from 2007-08.

A number of high value engineering projects started from mid 2008, including \$170 million for the construction of the Bonaparte Gas Pipeline (connecting a natural gas processing facility at Wadeye to the Amadeus Basin to Darwin pipeline near Ban Ban Springs), and US\$700 million for the development of the Montara, Skua and Swift oilfields in the Timor Sea. Expenditure on residential and commercial buildings also increased from June 2008.

This demonstrates the influence of engineering-related construction associated with major projects on the Territory’s construction industry and economy.

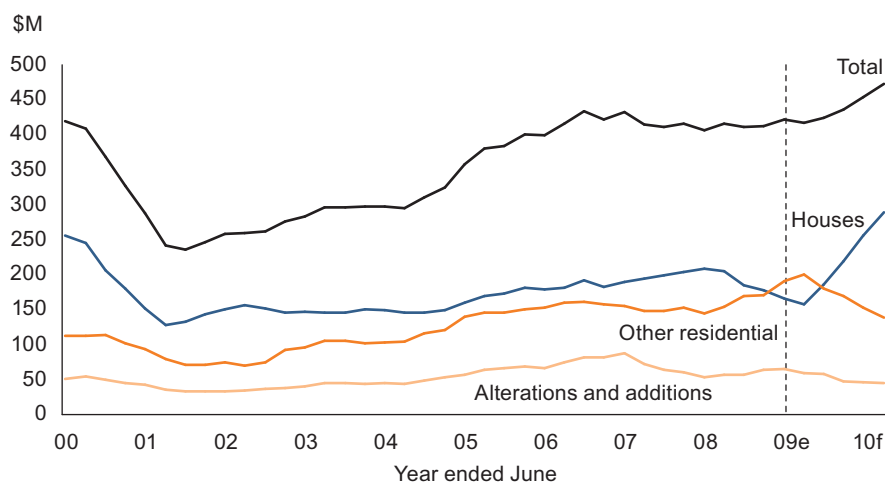
The increase in engineering construction expenditure from \$220 million in 2000-01 to \$1.5 billion in 2008-09 has caused the proportion of residential and non-residential construction expenditure to decline from about 70 per cent of total expenditure in 2000-01, to about 35 per cent in 2008-09. However, the value of residential and non-residential construction has increased from \$451 million in 2000-01 to an estimated \$831 million in 2008-09.

Major construction projects have a significant effect on the Territory economy, including being a key contributor to the rapid population and economic growth in the Territory since 2000-01. However, the total expenditure and the timing has proved very difficult to anticipate, with decisions made by the mainly private sector proponents driven by external economic factors and commercial imperatives. This creates uncertainty about future employment prospects, and changes in measures of economic growth, such as gross state product and state final demand.

Residential Construction

The construction of residential dwellings, conversions (converting commercial buildings into dwellings), and alterations and additions to existing dwellings is a mainstay of construction activity in the Territory. In 2008-09, residential construction expenditure is estimated to be \$417 million, or about 18.1 per cent of total construction expenditure (Chart 12.2).

Chart 12.2: Territory Residential Construction Work Done (moving annual total)



e: estimate; f: forecast

Source: ABS, Cat. No. 8752.0, Northern Territory Treasury

The value of residential work done in 2008-09 was unchanged from 2007-08, with a \$48 million decline in work on new houses offset by a \$49 million increase in the value of work on other dwellings and alterations.

There has been considerable residential construction activity in the past five years, with expenditure increasing by about 10 per cent between 2004-05 and 2008-09. Reasons for the increase in residential construction expenditure in the Territory include: high rates of population growth, and household formation (more dwellings); rising household incomes (more expensive dwellings); and less stringent lending practices and government financial incentives for home buyers (more affordable dwellings).

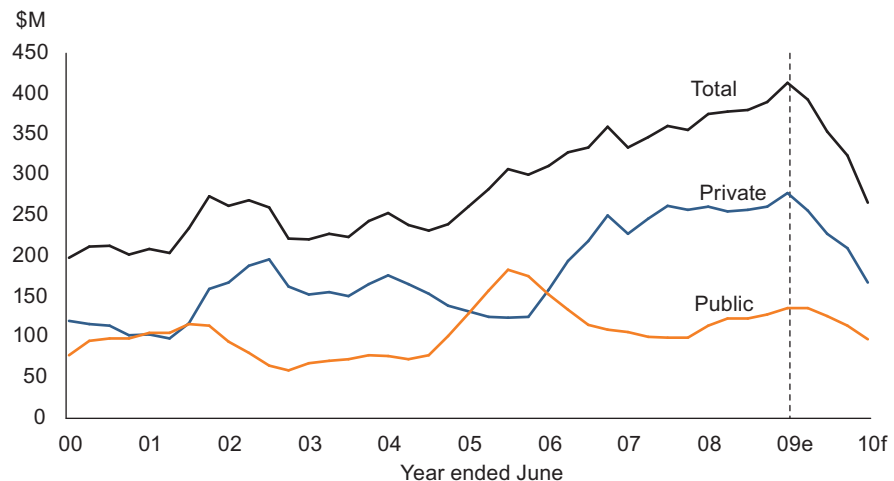
In the Territory the private sector accounted for about 74 per cent of the value of residential construction in 2008 calendar year, compared to about 69 per cent in 1998.

Non-residential Construction

The value of work done on non-residential buildings, such as construction of hotels, shopping centres, factories, offices, schools and hospitals, has historically been slightly less than on residential construction.

In 2008-09, the value of non-residential construction work done is an estimated \$414 million, or about 18 per cent of total construction expenditure. Non-residential construction spending increased by 10.4 per cent compared to 2007-08, with private sector spending increasing by 6.5 per cent and public sector spending by 19.1 per cent. The increase puts the value of non-residential construction on par with the value of residential construction for the first time since 2001-02 (Chart 12.3).

Chart 12.3: Territory
Non-residential Construction
Work Done (moving annual total)



e: estimate; f: forecast

Source: ABS Cat. No. 8752.0, Northern Territory Treasury

There has been considerable non-residential construction activity in the past five years, with expenditure increasing by about 58 per cent between 2004-05 and 2008-09. In this period, the public sector spent an average of \$128 million a year, and the private sector spent an average of \$211 million a year.

Public sector spending declined from 2005-06, but began to increase again from mid 2008. Private sector spending increased constantly from 2005-06 through to 2008-09.

Engineering Construction

Since 2000-01, the value of engineering work done in the Territory can be mostly attributed to construction of major projects, especially construction of infrastructure to exploit the Territory's petroleum and natural gas resources by the private sector.

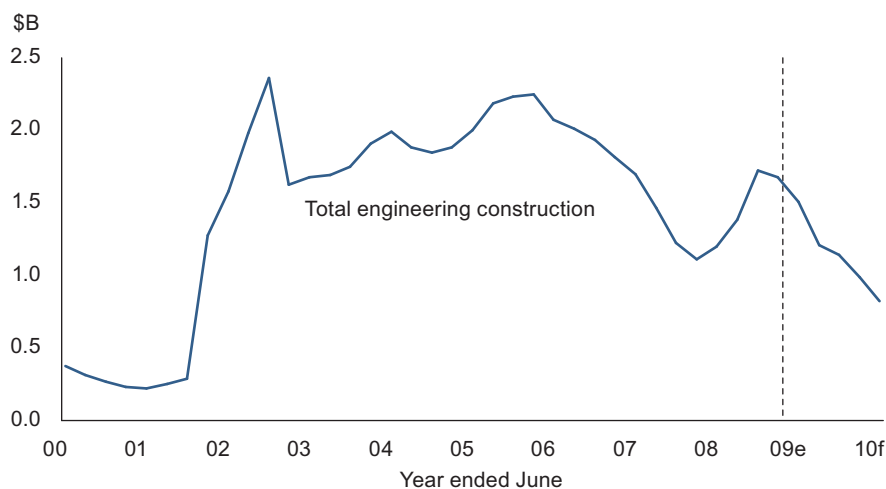
For example, about \$4.2 billion was spent between 2003 and 2006 constructing the infrastructure required to recover, transport and process gas, condensate and LPG from the Bayu-Undan field in the Timor Sea.

In 2008, engineering construction expenditure was \$1.7 billion. This was a 41 per cent increase in spending compared to 2007, with an increase in private sector spending of 160 per cent. Engineering construction accounted for about 69 per cent of total construction expenditure (Chart 12.1).

Major projects completed or commenced in 2008 include the:

- \$170 million gas pipeline and processing plant near Wadeye, built to supply gas from the Blacktip field in the Joseph Bonaparte Gulf (in Western Australian waters) for electricity generation in the Territory;
- US\$700 million Montara, Skua and Swift oil projects in the Timor Sea;
- \$140 million Browns Oxide copper and zinc mining and processing project outside Batchelor;
- \$167 million expansion by GEMCO of manganese processing capacity at Groote Eylandt; and
- \$30 million gas pipeline connecting the Wickham Point LNG plant to the Darwin to Amadeus pipeline.

Chart 12.4: Territory Engineering Work Done (moving annual total)



e: estimate; f: forecast

Source: ABS Cat. No. 8752.0, Northern Territory Treasury

Although there has been considerable engineering construction activity in the past five years, expenditure decreased by about 25 per cent between 2004-05 and 2008-09. Nevertheless, engineering expenditure in 2008-09 is expected to be about three times more than in 1999-2000.

This demonstrates the significance of major projects to the construction industry and Territory economy, and the volatility of timing of expenditure on major projects. For example, the downward trend of engineering construction activity since 2005-06 was reversed in 2008-09, primarily due to private sector projects worth about \$450 million.

Power and Water Corporation

The Power and Water Corporation has commenced its \$1.4 billion capital investment and maintenance program, with key projects including new electricity generation in Alice Springs and Darwin, provision of essential services to up to 3400 households in new suburbs in Darwin and Palmerston, diverting sewage from the Larrakeyah outfall to the upgraded Ludmilla treatment plant, and bringing Manton Dam back into service.

Outlook

Economic conditions in Australia and the world continue to deteriorate during 2009, with recessions in most developed countries. This is likely to reduce private sector construction activity in the latter part of 2009 and into 2010. In particular, there is potential that major projects expected to start construction in the Territory from 2009 and 2010 will be deferred until global credit markets become less risk averse, and there is increased demand for energy and mineral resources.

Although of construction activity is difficult to forecast in the current economic environment, Territory construction expenditure is forecast to decline by about 33 per cent to \$1.6 billion in 2009-10, primarily due to declining non-residential and engineering construction activity.

In 2009-10, expenditure on engineering construction is forecast to decline by about \$680 million, or 45 per cent, compared to 2008-09. Similarly, expenditure on non-residential construction is forecast to decline by about \$148 million, or 36 per cent compared to 2008-09. However, expenditure on residential construction is forecast to increase by \$56 million, or 13 per cent.

Residential Construction Outlook

Public sector construction activity will partly offset the decline in the value of engineering work done by the private sector during 2009-10, with the Territory and Commonwealth governments to spend about \$350 million constructing roads, port facilities, school and health buildings.

The accelerated release of up to 1500 lots in Palmerston and the northern suburbs of Darwin over 2009 and 2010 is expected to lead to a surge in residential construction during 2009-10 due to high demand for housing in the Darwin region. Provision of the associated road and essential service infrastructure should also support engineering-related construction.

In the short to medium term, expenditure by the Territory and Commonwealth governments on public housing should support residential construction work done in 2009-10. In particular, about \$672 million will be spent through the joint Strategic Indigenous Housing Infrastructure Program (SIHIP), building about 980 houses and upgrading up to 2500 houses by 2011-12.

Additionally, the Commonwealth has allocated funds through the Nation Building and Jobs Plan to be spent during 2009-10 on housing in the Territory. Separately, the Territory Government has announced a plan to provide more public housing in urban areas, including more short term and seniors accommodation.

Residential construction activity is forecast to increase by 13¼ per cent in 2009-10, primarily due to public sector spending through the SIHIP and Nation Building and Jobs Plan.

Residential construction by the private sector is forecast to remain flat, with expenditure constrained by declining housing affordability, more stringent home lending requirements, and a decline in the construction of high and medium density dwellings in central Darwin.

Major residential construction projects expected to start in 2009-10 include the construction of housing in remote communities as part of the Territory Government's Closing the Gap policy (about \$31 million), and construction of the Bellamack Seniors Village by the Territory and Commonwealth governments (about \$10 million).

Non-residential Construction Outlook

Non-residential construction activity is expected to decrease by 36 per cent in 2009-10, anticipated higher levels in public sector construction unable to completely offset the large decline in private sector construction.

Private sector non-residential construction activity is likely to decrease in 2009-10, with current levels of spending not expected to be achieved as work under way or planned is deferred or delayed. Projects that could support private sector activity during 2009 and 2010 include the:

- \$10 million expansion of the Jape Home Maker Centre in north Darwin;
- \$17 million SkyCity Darwin Casino Little Mindil development; and
- \$48 million Quest Arcadia development in central Darwin.

Public sector activity is expected to increase during 2009 and 2010, with both the Territory and Commonwealth governments allocating funds for construction works on school facilities. In particular, the Commonwealth's Nation Building and Jobs Plan announced in February 2009 should direct

around \$187 million to schools in the Territory to assist with construction of new or upgrade of existing facilities.

Also supporting public sector non-residential construction expenditure during 2009 and 2010 are the:

- \$54 million Pre, Primary and Middle Years school at Rosebery in Palmerston;
- \$14 million upgrade to the Darwin Correction Centre at Berrimah; and
- \$13 million investment in school, health and police infrastructure in remote communities as part of the Closing the Gap strategy and the Northern Territory Emergency Response.

Engineering Construction Outlook

In the absence of any new mega-projects, the forecast value of engineering work done in 2009-10 is expected to decline by about \$680 million, or about 45 per cent less than in 2008-09. Engineering construction in 2009-10 will be supported by:

- Power and Water Corporation capital works program, with forecast spending of up to \$260 million to upgrade and build electricity, water and sewerage supply infrastructure during 2009-10;
- Territory Government capital works program, including \$20 million on headworks in Palmerston East, \$110 million extending Tiger Brennan Drive, \$32 million on national highway improvements, and \$4 million for the Palmerston boat ramp;
- Royal Australian Air Force Darwin Redevelopment State 2, with \$20 million spent upgrading existing facilities including fuel farms, workshops, fitness centre, airfield lighting and construct a new logistics headquarters between late 2008 and late 2010; and
- ongoing development of the US\$700 million Montara oilfield project, with completion in late 2009.

Longer Term Outlook

Global demand for energy and mineral resources is expected to decline during 2009, before increasing from 2010 as the world economy begins to recover. This could delay construction of previously foreshadowed Territory based major projects, such as development of oil and gas fields, or expansion of mineral processing facilities.

Nonetheless, the plentiful proven and probable gas reserves off the northern coast of Australia and the Territory, and forecast world energy demand, make expansion of the energy supply and LNG industry likely in the medium term.

In particular, expansion of the Wickham Point LNG plant from the current 3.7 million tonnes a year to around 10 million tonnes a year is likely in the medium term. ConocoPhillips and the joint venture partners are examining options for obtaining sufficient gas reserves, including from the Caldita, Barossa and Greater Sunrise fields.

Further, Inpex and its joint venture partner, Total, are undertaking the front end engineering and design process for a proposed LNG plant (able to produce 8 million tonnes a year) at Blaydin Point on Darwin Harbour. An

estimated \$12 billion would be spent over four to five years constructing the plant. The joint venture partners are to decide when to start construction at the end of 2009, or early in 2010.

Ratification of the International Unitisation Agreement and the Certain Maritime Arrangements in the Timor Sea Treaty in January 2007 permits development of the Greater Sunrise liquids and gas field in the Timor Sea. Greater Sunrise has an estimated 6 trillion cubic feet of natural gas. Options being considered include linking with the existing Bayu-Undan project in the Timor Sea and the Wickham Point LNG plant, or a floating LNG facility.

No decision has been made on the timing of development of Greater Sunrise, with development contingent on the project receiving legal, regulatory and fiscal certainty from both the Timor-Leste and Australian governments.

Based on experience with construction of the Wickham Point LNG plant, these projects would lead to further non-residential and residential construction to provide services and accommodation to the influx of population attracted by the employment opportunities. For example, the Blaydin Point LNG plant would need up to 2000 workers during construction. Plans for accommodating these workers include constructing a work camp in Howard Springs.

In the medium to long term, economic and population growth in the Territory will increase demand for housing, and retail and commercial space resulting in the development of residential and commercial properties in most Territory centres.