

## Chapter 11 Construction

### Key Points

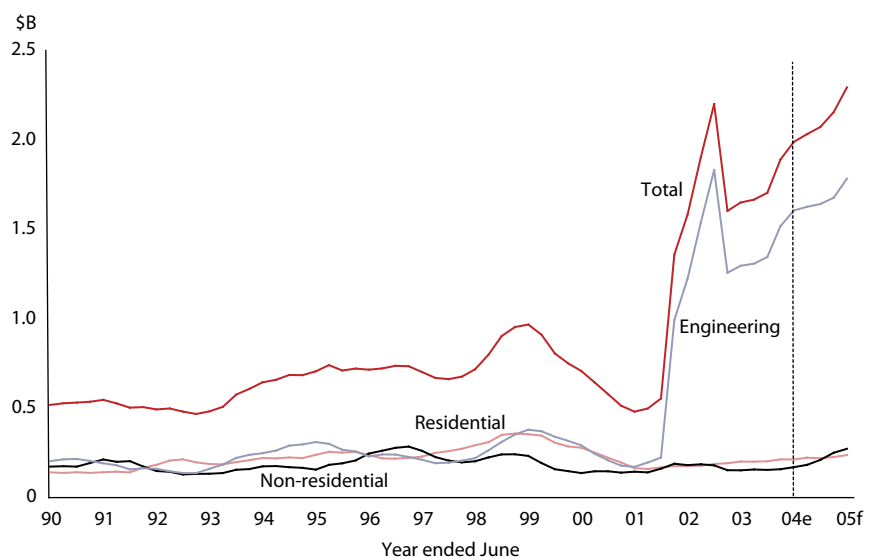
- In the Territory, the construction industry accounted for 6.9 per cent of Gross State Product (GSP) on average during the 1990s, and employed almost 8.0 per cent of the workforce.
- Construction activity slowed markedly in the period immediately following the major defence force relocation to the Top End in the late 1990s as economic and population growth weakened.
- Since then, residential and non-residential building and property markets have continued to be relatively weak, and the Territory has not participated in the national construction and property boom of recent years.
- Major infrastructure projects such as construction of the Alice Springs to Darwin leg of the rail link with Adelaide and work to develop the Bayu-Undan oil and gas project have kept engineering construction at record levels in recent years.
- Largely as a consequence of the liquid natural gas plant being constructed at Wickham Point, the value of construction is forecast to increase by around 15 per cent to \$2.3 billion in 2004-05, after increasing by around 20 per cent to \$2 billion in 2003-04.

The construction industry comprises residential building, non-residential building and engineering components. The industry accounted for 6.9 per cent of GSP on average during the 1990s, employing more than 7.7 per cent of the workforce.

Construction slowed markedly following strong growth in the mid to late 1990s associated with the defence force build up, falling to 3.9 per cent of GSP in 2000-01. However, during 2001-02, the industry showed signs of recovery, accounting for 6.5 per cent of GSP and this continued in 2002-03 where construction accounted for 7.0 per cent of GSP. This recovery was primarily driven by an upswing in engineering work relating to Bayu-Undan stage one and the Alice Springs to Darwin leg of the rail link with Adelaide.

The industry has traditionally played an important role in the Territory economy given strong links to other sectors of the economy and the significant proportion of locally-sourced goods and services used as inputs.

Chart 11.1: Territory Construction Work Done (moving annual total, 2001-02 dollars)



e: estimate f: forecast

Source: NT Treasury, ABS Cat. Nos 8752.0, 8762.0, 8782.0.65.001

The residential construction industry undertakes construction of new housing and other residential buildings (townhouses, units), conversions (converting non-residential buildings into residential buildings) and alterations and additions to existing residential buildings. Residential construction is undertaken for both the private and public sectors.

Demographic, social and economic factors have strong influences on the demand for residential dwellings and, in turn, on construction. Factors affecting the demand for housing include: rate of new household formation, income and wealth and its distribution, availability and cost of housing, price of new dwellings relative to existing dwellings and government housing policies.

In the short term, interest rates and business and consumer confidence are major influences on the building cycle.

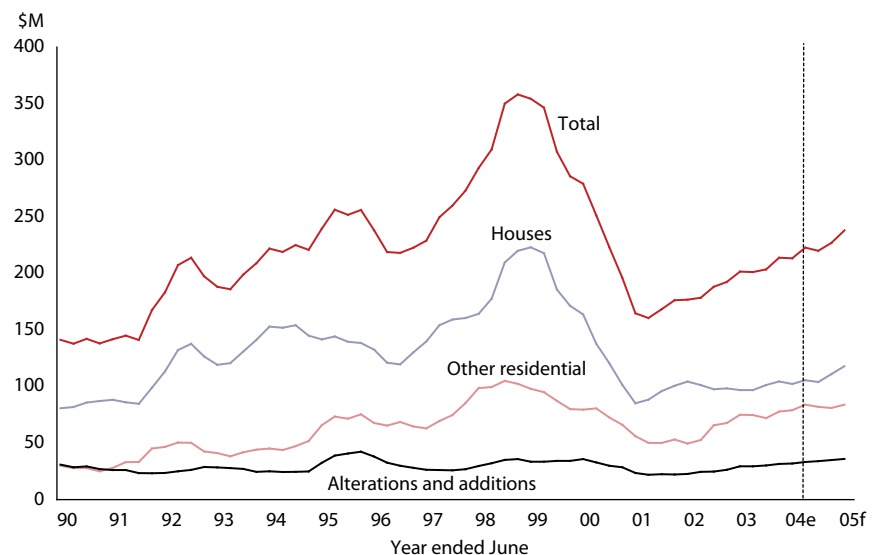
### Population Mobility

The Territory has a relatively young and mobile population, with high gross interstate migration rates (movements into and out of the Territory) that fluctuate at up to four times the average for other jurisdictions. It also has a high proportion of Indigenous people living in remote areas where home ownership is extremely low. These factors result in a low proportion of home ownership, with a correspondingly higher proportion of households renting. According to 2001 Census data, more than 40 per cent of Territory dwellings are rented, compared to about 25 per cent nationally. The proportion of home ownership in the Territory is around 42 per cent according to 2001 Census data, compared to the national figure of around 66 per cent. In Darwin, home ownership is slightly higher than the remainder of the Territory at around 50 per cent.

### Non-residential Construction

There are two components of non-residential construction. The first, non-residential buildings, include hotels, shopping centres, factories, offices, schools, hospitals, cinemas, and the like. The second, engineering construction, encompasses infrastructure other than buildings and includes items such as roads, bridges, railways, dams and pipelines, power generation and transmission infrastructure and telecommunications infrastructure, as well as construction for mineral and gas developments.

Chart 11.2: Territory Residential Building Work Done (moving annual total, 2001-02 dollars)



e: estimate f: forecast  
Source: NT Treasury, ABS Cat. No. 8752.0

The level of private sector investment in non-residential building is determined by several factors, including the adequacy of existing capital stock, interest rates, anticipated future demand and general business confidence. Public sector expenditure on non-residential and engineering construction is targeted to meet medium to long term needs and provide social and economic infrastructure such as schools, hospitals and roads.

Due to the relatively small size of the Territory economy, large individual projects can have a significant impact on the total value of work done in any year. Non-residential construction and especially engineering work tend to be 'lumpy' over time. Larger developments generally only proceed when certain demand thresholds are reached, as is often the case with private sector projects for shopping centres, hotels and offices.

## Engineering

Traditionally, engineering construction activity in the Territory, as for Australia, has been predominantly funded by the public sector, particularly infrastructure development.

Excluding the impact of the Timor Sea oil and gas 'mega-projects' such as the Laminaria-Corallina oilfields in 1998-99 and the Bayu-Undan oil and gas project (2002 onwards), private sector engineering activity (for the private sector, as opposed to private sector engineering activity for the public sector) has averaged around a third of the Territory's total engineering construction work done since 1990.

However, as a proportion of work done, private sector engineering construction has tended to grow over the past decade. With work on the Alice Springs to Darwin railway and Bayu-Undan being undertaken, private sector work has markedly exceeded that of the public sector since the beginning of 2002.

## Residential Construction

### Strong Activity in 1990s

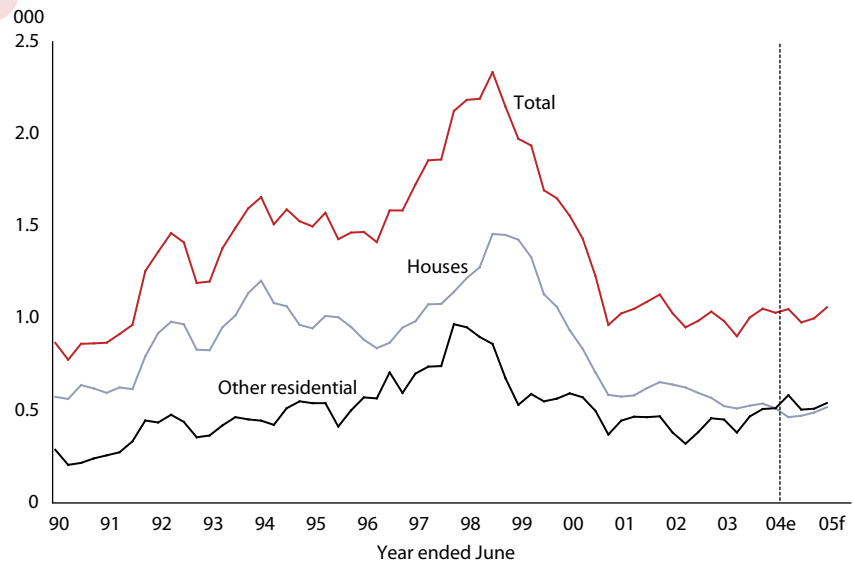
Territory housing construction sustained strong levels of activity over most of the 1990s. Growth reflected the impact of the defence force movement to the north in conjunction with activity in tourism and other sectors, boosting economic and population growth and demand for dwellings. Economic activity associated with the large capital investment and operational expenditures from the defence expansion program further stimulated employment and population growth. Together with relatively low interest rates, this led to strong investor and developer confidence in the residential market. High levels of demand and confidence led to significant residential construction activity, particularly in the Darwin area and notably of units and high-rise apartment complexes.

### Defence Force Requirements

In 1991, around 5 700 defence personnel and dependants were based in the Territory. With the start of the defence force expansion, known as the Army Presence in the North program (APIN), this number is estimated to have increased to approximately 12 900 by June 2004. The bulk of this relocation occurred from 1996 to 2000, and markedly increased the underlying demand for residential dwellings in the Darwin region.

Defence relocations resulted in significant residential construction activity through the Defence Housing Authority (DHA). The DHA provides housing for defence personnel through its ownership of dwellings, acting as a developer and also through leasing properties from the private sector. While the defence force has completed the majority of its relocation program, the 1st Aviation Regiment is expected to be relocated to Darwin, beginning in 2005.

Chart 11.3: Territory Residential Dwelling Commencements (moving annual total)



e: estimate f: forecast  
 Source: NT Treasury, ABS Cat. No. 8750.0

## Palmerston Land

Strong population growth from 1995 to 1997 associated with the defence relocation and Darwin's limited supply of readily available land for housing development have been the main factors in the growth of Palmerston.

Palmerston's ready supply of land has seen the suburbs of Durack (Fairway Waters), Gunn (The Chase), Bakewell, Farrar and Rosebery develop and grow substantially in a relatively short period. Nonetheless, with the current demand for land and housing construction relatively low, the availability of developable land is not an immediate issue for residential development in Palmerston.

Darla, a subdivision of Rosebery, is the latest Palmerston location where residential development has commenced, with Bellamack the next suburb earmarked for residential development. It is anticipated that the existing available land in Gunn, Farrar, Durack and Rosebery will be sufficient for at least the next five years.

## Alice Springs Land

Conversely, there has been a shortage of residential land available for development in Alice Springs, with no new residential blocks released in more than ten years. Native title issues have been the primary cause of the shortage, although landmark Indigenous Land Use Agreements (ILUAs) finalised in April 2004 will make land available and should pave the way for a more streamlined negotiation process with traditional landowners in the future.

The recent negotiations have been in relation to two parcels of land in the Larapinta area totalling 85 residential allotments, and it is expected that these blocks will be ready for residential construction in mid to late 2004. With the lack of new residential construction in Alice Springs over the past 10 years, the associated 'pent-up' demand should see rapid uptake of this land. Dependent on further ILUA negotiations, more parcels of land in the Larapinta and Mount Johns Valley areas are proposed for development in Alice Springs in the next few years.

While Darwin has seen substantial construction of medium and high density dwellings (notably in the central business area), the establishment of relatively new housing estates continues. New residential estates developed in Darwin in recent years include Bayview, Woolner, Parap Grove, The Narrows, Tipperary Waters, Cullen Bay and City Valley.

Residential Building Approvals

Residential building approvals are a lead indicator of short term dwelling construction activity. Following strong growth in 1996-97 and 1997-98, approvals peaked in 1998-99 before falling by approximately 30 per cent in both 1999-2000 and 2000-01.

Several factors contributed to the downturn in approvals. The primary reason was the magnitude of the construction boom driven by the residential requirements of the defence population. As defence-related housing requirements began to tail off, the extent of overbuilding became apparent. Rising interest rates acted as a further catalyst in the decline in private residential approvals. Increased building costs associated with the introduction of the Goods and Services Tax accentuated, to some extent, the cyclical decline already in place. Private sector approvals were boosted by the Territory Government's QuickStart schemes and the doubling of the First Home Owner Grant. While these initiatives stemmed the rate of decline, total approvals (including public sector) fell a further 13 per cent in 2001-02.

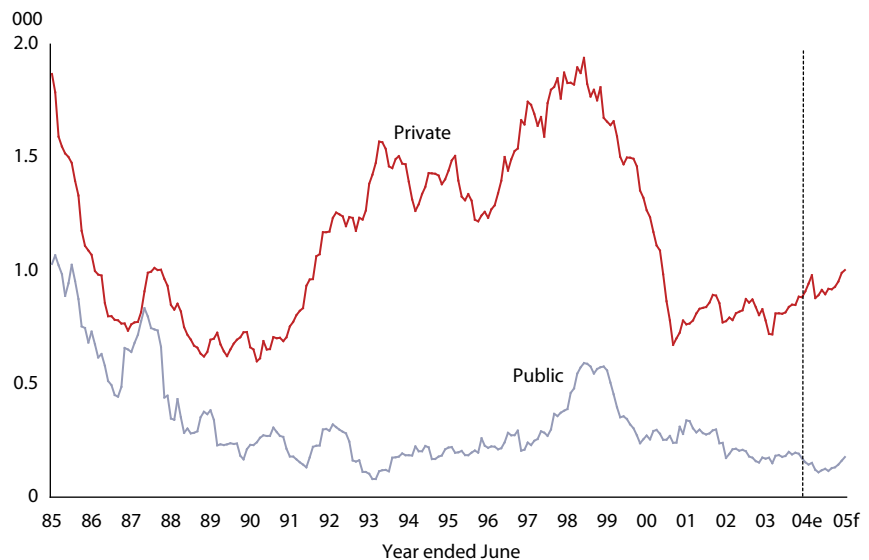
In 2002-03, the number of building approvals was unchanged from the previous 12 months at 950, comparable to early 1990s recession levels. Residential building approval numbers are estimated to have increased by around 12 per cent in 2003-04, albeit from a low base, to around 1 060. Strong growth was recorded in 'other' residential building approvals (units and apartments) due to a number of large unit developments in Darwin City. However this was offset by a further decline in house approvals, which fell to their lowest level since 1989.

Incentive Schemes

The QuickStart scheme, which ran between March and April 2001, and was reintroduced in November 2001 for a further two months, aimed to provide a stimulus to the construction industry. Combined with low interest rates and the temporary doubling of the First Home Owner Grant for newly erected dwellings, these incentives were well taken up by homebuyers, with a flow on to significantly higher activity. More than 430 new houses were built in the Territory with the aid of these incentives.

Nonetheless, even with the incentive boost, private dwelling approvals remain weak in historical terms as the incentives acted to pull forward activity. Following the period of the incentive-induced boost, approvals fell back as underlying supply and demand fundamentals reasserted influence on dwelling investment decisions.

Chart 11.4: Territory Residential Building Approvals (moving annual total)



Source: NT Treasury, ABS Cat. No. 8731.0

Approximately 17 per cent of total dwelling approvals during the 1990s were for public dwellings, an average of 257 per year. Since the start of this decade, the proportion has climbed to 21 per cent, despite public dwelling approval levels falling. The increase is due to a fall in private approvals of nearly 30 per cent, from an average of 1 300 per year in the 1990s to 900 per year since 2000.

### Territory Housing Business Services

The main providers of public housing in the Territory are Territory Housing Business Services (THBS), which manages the Territory Government's public housing stock, the Indigenous Housing Authority of the Northern Territory (IHANT) and the DHA. These organisations typically provide partially or fully-subsidised accommodation to approved low-income earners, Indigenous persons, and public sector and defence employees. In 2003-04, it is estimated that these organisations constructed 170 dwellings. The disposal of public sector dwellings in 2003-04 did not have a significant impact on net housing stock.

After strong investment in public housing following Self Government in 1978, the Territory Government has been maintaining rather than increasing its level of housing provision and construction. This has increasingly allowed the private sector to meet the demand for additional housing. However, according to 2001 Census data, public housing stock as a proportion of total stock (at 24 per cent), remains higher in the Territory than nationally (at 12 per cent), although the gap is narrowing (32 and 12 per cent respectively in the 1991 Census).

Despite public housing approvals remaining relatively steady over the past 15 years, public housing stock has fallen, primarily due to the THBS program from 1998 which disposed of around 1 000 under-utilised three and four bedroom houses and replaced them with around 300 new one and two bedroom units. It is estimated that THBS is responsible for more than 6 500 dwellings throughout the Territory.

Divestment was through direct sales (to existing tenants), the open market and sales of complete blocks of units to developers, with most stock sold in 1998 and 1999. The divestment program, combined with THBS finance assistance through the HomeNorth loan scheme, is estimated to have increased home ownership levels in the Territory by around 2 percentage points.

Since then, THBS has invested in one and two bedroom low-density dwellings more appropriate to client needs. Together with the divestment program, it is estimated the construction program, completed in 2001-02, has not significantly altered net THBS housing stock.

Although THBS is not currently constructing any new dwellings, they have a significantly increased maintenance and upgrade program in place.

### Defence Housing Authority

DHA-managed stock has increased from approximately 1 260 in 1992 to an estimated 2 400 at June 2004, associated with the APIN relocation program. Not all stock is publicly owned, with the DHA offering investors long-term rental contracts to reduce capital investment costs. The completion of the Carey Street three towers development in 2002-03 (adjacent to the Darwin CBD) was their most recent significant boost to DHA housing stock. In 2003-04, only a few new dwellings were constructed. The next significant DHA construction program for new houses is planned for Lee Point in mid 2005 to accommodate personnel relocating with the 1st Aviation Regiment. Other construction work carried out by DHA during 2003-04 included 60 upgrades at Tindal RAAF base (worth \$100 000 each). In 2004-05, another 50 upgrades are planned.

Indigenous Housing Authority of Northern Territory

IHANT was formed in 1995 and is responsible for the development of improved housing for Indigenous people. It is estimated that 145 houses were constructed by IHANT during 2003-04, at a cost of around \$20 million. IHANT also generates considerable building activity through its maintenance program. This strategic initiative has reallocated funding from new construction to maintenance of dwellings to lengthen their life span. At 1 March 2004 there were nearly 5 900 dwellings eligible for this program. Both IHANT and the DHA typically tender their dwelling construction requirements to the private sector.

Property Markets

The building industry and property markets are subject to strong fluctuations in activity, real estate prices and sales volumes. Activity levels tend to fluctuate around sustainable levels, which are a factor of underlying demand that, in turn, depends on economic and demographic factors, with a corresponding cycle in prices. The fluctuations in activity are associated with financial capital flows into and out of investment in real estate.

House Prices Strengthened

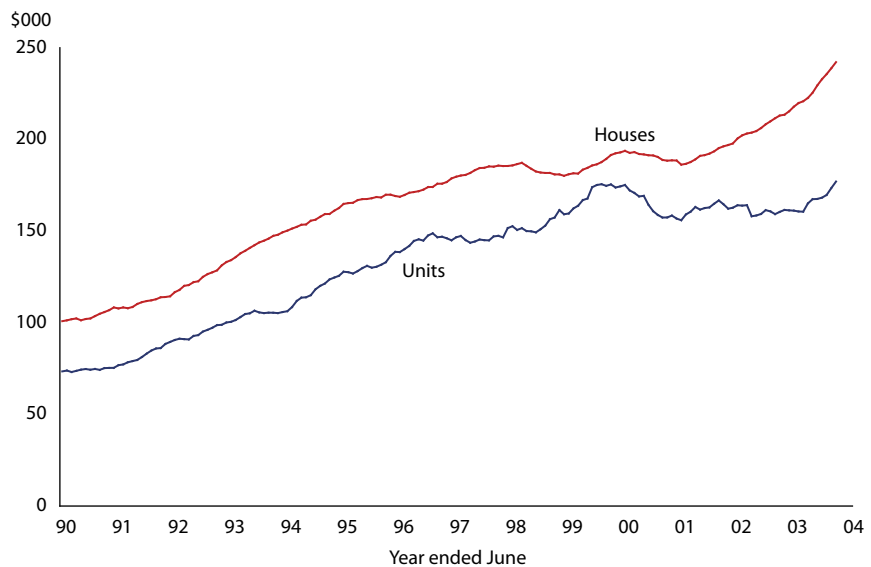
The ABS reports that established house prices in Darwin increased by 56 per cent in the ten years to December 2003, significantly less than the 126 per cent rise for the weighted average of the eight capital cities. Darwin established house price growth in the five years to December 2003 was 23 per cent, compared to the eight capital cities weighted average growth of 90 per cent, and highlights the extent to which the Territory has not participated in the housing boom experienced nationally in recent years.

The ABS estimates that Darwin established house prices rose by 8.5 per cent in the year to December 2003. While this was the strongest annual growth recorded in Darwin since the mid 1990s, it was much less than the 18.2 per cent growth recorded by the weighted average of the eight capital cities for the same period. Recent interest rate rises are expected to affect prices growth nationally more than in the Territory. Further, the Territory should continue to have the most affordable housing of all the jurisdictions.

Unit Prices

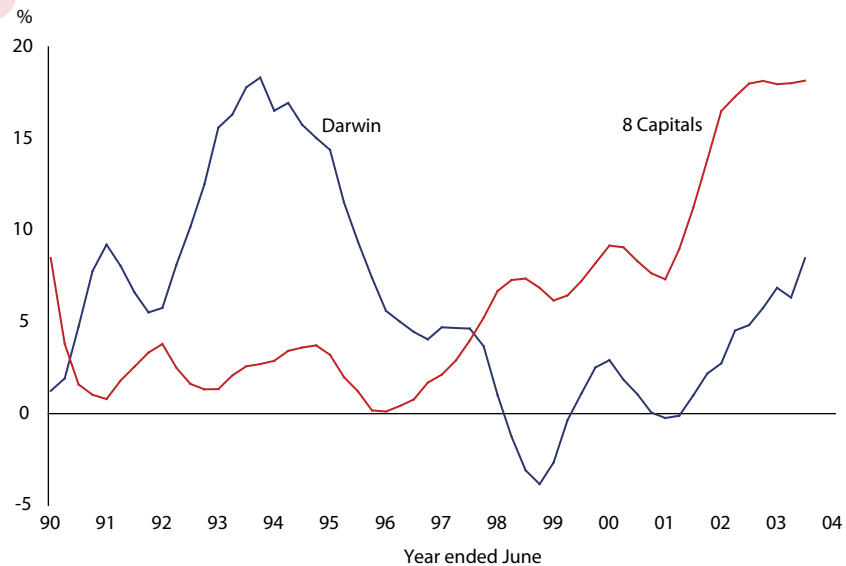
The Real Estate Institute of Australia (REIA) reports that Darwin's average two-bedroom unit prices peaked in 2000 at around \$160 000. There was a sharp fallback in prices in 2001, reflecting oversupply in the market and the downturn in the Territory onshore economy. There has been a slight recovery in unit prices in the past two years, although only returning to levels recorded in the late 1990s.

Chart 11.5: Average Territory House/Unit Prices



Source: NT Treasury, Australian Valuation Office

Chart 11.6: Darwin and Eight Capitals Established House Price (year on year growth, percentage change)



Source: NT Treasury, ABS Cat. No. 6416.0

## Vacancy Rates

Territory rental vacancy rates were at relatively high levels for several years until early 2002, reflecting the oversupply of dwelling stock. Over the past two years, vacancy rates have fallen back to levels more reflective of a balanced market, although Darwin vacancy rates appear to have levelled off in the past 12 months.

The Real Estate Institute of the Northern Territory estimates that in the year to March quarter 2004, the average residential vacancy rate in Darwin was 6.1 per cent for houses and 6.7 per cent for units. For the same period, Palmerston recorded vacancy rates of 3.7 per cent for houses and 3.8 per cent for units. Alice Springs recorded unit vacancies of 5.7 per cent and housing vacancies of 5.7 per cent. Katherine recorded vacancy rates of 6.1 per cent for houses and 6.2 per cent for units.

## Rental Returns

During the 1990s, Darwin had the highest rental returns for housing of all the capital cities, and the second highest return for units (behind Sydney). High returns attracted investors, and the increased demand, particularly for inner-city units, led to higher prices and levels of construction. A subsequent oversupply of properties saw rental returns decline as investors competed in a saturated market.

According to the REIA, rental returns for a three-bedroom house in Darwin averaged \$248 per week in 2003, below the peak of \$257 in 1998. A two-bedroom unit generated an average return of \$178 for the same period, up slightly from 2002 (\$173) which was the lowest return recorded since Darwin unit returns were first documented in 1995.

## Property Sales

The number of Territory residential property sales grew strongly over the first half of the 1990s, followed by declines in 1995 and 1996. Following three years of growth, the volume of sales peaked in 1999, boosted by public sector disposals related to the THBS divestment program. Property sales fell significantly in 2000 and 2001, notably for houses, which fell more than 30 per cent over the two year period.

Unit sales also fell significantly (around 20 per cent) during 2000 and 2001. Since then, higher quality units have come onto the market in Darwin, leading to greater pressure for prices to fall in lower quality units. Sales of units were concentrated in the Darwin and Palmerston area, accounting for around 75 per cent of all units sold in the Territory in the past three years.

Chart 11.7: Number of Territory House/Unit Sales (moving annual total)



Source: NT Treasury, Australian Valuation Office

Sales numbers for both houses and units have been improving since the trough in mid 2001. Growth has been driven equally by sales of both units and houses over this period, although the proportion of unit sales has increased significantly. Sales of units increased by around 51 per cent in the year to March 2004, while house sales have increased by around 17 per cent over the same period.

## Government Initiatives

The recent strengthening in sales volumes can be partly attributed to the positive impact of Territory Government initiatives. In the 2002-03 Budget, the Territory Government increased the first home owner's stamp duty concession threshold to \$125 000 (from \$80 000), and aligned the eligibility criteria with the First Home Owner Grant. In addition, a new rebate of up to \$1 500 was made available to all home buyers for the purchase of a principal place of residence.

## Land Sales

After peaking in 1998, Territory land sales fell considerably. Annual sale numbers have nearly halved since that period but increased by around 17 per cent in the year to March 2004. In the same period, Palmerston accounted for an estimated 40 per cent of urban land sold, up from 31 per cent a year earlier. Greater Darwin decreased from 55 per cent to 53 per cent over the same period, while Alice Springs fell from 13 per cent to 6 per cent.

## Non-Residential Building

### Non-residential Building

As with residential building, non-residential building activity in the 1990s was influenced by strong economic and population growth. Population growth fuelled the need for expanded social and commercial infrastructure to support growing demand levels, notably for shopping and educational facilities. Strong tourism growth in the 1990s also resulted in major hotel investment in the past decade.

In the four years to 1998-99, non-residential building work averaged around \$270 million per annum compared to \$198 million per annum in the four years to 1994-95. The surge in activity in the mid to late 1990s related to strong growth in retail and tourism-related construction. Growth also came from construction of industrial buildings, the Army's Robertson Barracks, and refurbishment and rebuilding associated with the post-Katherine flood period.

In line with the completion of major defence works and moderating population growth, non-residential building fell back markedly in 1999-2000 and 2000-01, before increasing by 24 per cent in 2001-02, driven primarily by upgrades of the Darwin and Alice Springs hospitals and the significant expansion of the Ayers Rock Resort in Yulara. In 2002-03, non-residential building activity fell as the completion of the hospital upgrades reduced public investment, which was down almost 30 per cent from the previous year.

## Large Projects

For 2003-04, overall activity is estimated to have increased with a number of medium-sized business premises such as the Jape Homemake Village and Nightcliff Shopping Centre expansions contributing to growth, while the \$10.5 million Melaluca Backpackers Hostel in Mitchell Street and the commencement of the \$55 million Vopak fuel and bulk liquids terminal at East Arm in April 2004 are projects of greater significance. The \$65 million Mitchell Centre and the \$22 million TIO building on Mitchell Street were both completed late in 2003 and the \$7 million reconstruction of the Longitude 131 resort at Ayers Rock also contributed to private sector work done in 2003-04.

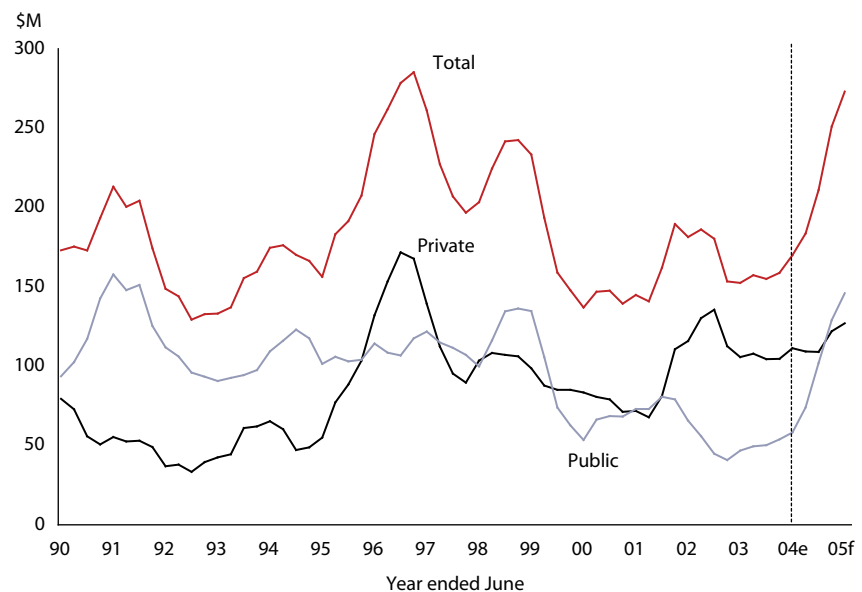
Public spending on non-residential building is estimated to have increased in 2003-04, boosted by the construction of railway terminals at Darwin, Katherine and Tennant Creek and work for the upgrade of facilities at Darwin High School. Further, a significant level of public sector activity was undertaken in remote communities as part of the National Aboriginal Health Strategy.

## Engineering Construction

Traditionally, engineering construction activity in the Territory, as for Australia, has been predominantly funded by the public sector, especially infrastructure development.

Excluding the impact of the Timor Sea oil and gas 'mega-projects' such as the Laminaria-Corallina oilfields in 1998-99 and the Bayu-Undan oil and gas project (2002 onwards), private sector engineering activity (for the private sector, as opposed to private sector engineering activity for the public sector) has averaged around a third of the Territory's total engineering construction work done since 1990.

Chart 11.8: Non-Residential Building Work Done (moving annual total, 2001-02 dollars)



e: estimate f: forecast  
Source: NT Treasury, ABS 8752.0

## Engineering

Chart 11.9: Engineering Construction Work Done (moving annual total, 2001-02 dollars)



e: estimate f: forecast

Source: NT Treasury, ABS Cat. Nos 8762.0, 8782.0.65.001

However, as a proportion of work done, private sector engineering construction has tended to grow over the past decade. With work on the Alice Springs to Darwin railway and Bayu-Undan being undertaken, private sector work has markedly exceeded that of the public sector since the beginning of 2002.

## Major Projects

Territory engineering construction increased seven-fold from the 2000-01 level of \$172 million to more than \$1.2 billion in 2001-02. The sharp spike was primarily attributable to work for Bayu-Undan stage one and the railway. As expenditure for these projects continued in 2002-03, engineering construction activity increased by around 6 per cent to \$1.3 billion.

However the magnitude of the strengthening in engineering activity reported by the ABS is misleading in terms of its actual benefit to the Territory economy. The majority of the Bayu-Undan stage one value-added work was done overseas, but was attributed to Territory engineering construction work done when the equipment was installed. The construction of Bayu-Undan stage one is estimated to have contributed around 65 per cent of total engineering work done in 2001-02, falling to around 50 per cent in 2002-03.

The railway project and associated bridgework was estimated to have been about 15 per cent of total engineering work done in 2001-02, increasing to more than 20 per cent in 2002-03 as construction reached its peak period. The construction of stage two of the East Arm Port also contributed significantly to total engineering construction during this period.

Engineering construction work is estimated to have increased by 20 per cent to almost \$1.6 billion in 2003-04. The significant increase is predominantly due to work for Bayu-Undan stage two, which began in mid 2003. Work on both the \$1.8 billion Liquefied Natural Gas (LNG) plant at Wickham Point near Darwin, and \$1 billion sub-sea pipeline have commenced, and are estimated to contribute around two thirds of engineering activity in 2003-04. This activity will more than offset the fallback in investment associated with the completion of Bayu-Undan stage one and the railway.

Historically, roads, highways and subdivisions have dominated engineering construction activity in the Territory, however in recent years the level of investment has weakened. In the three years to 1999-2000, investment in this category averaged \$101 million, but has fallen to an average of \$56 million in the 3 years to 2002-03. This fall is predominantly attributable to weaker levels of residential land development and its impact on the subdivisions category.

## Construction Outlook

Timing is often unpredictable for construction developments, with final decisions to proceed dependent on a host of independent and dynamic factors. These include the investment climate, adequate capital financing, the outlook for global economic growth, commodity prices, value of the Australian dollar, and perceptions about the Territory's comparative advantages.

### Activity Increasing

Construction activity in the Territory is forecast to increase by 15 per cent to \$2.3 billion in 2004-05. The value of residential building is forecast to increase by 12 per cent to \$238 million, while non-residential construction (including engineering) is forecast to increase by 16 per cent to a new record level of \$2 056 million.

Stronger non-residential building combined with increased residential building activity will be positive for employment in the construction industry after weak growth in recent years. Employment opportunities associated with Bayu-Undan stage two should increase as the project gears up to its peak construction phase, while significant defence infrastructure spending will boost activity.

### Residential Building

The outlook is for strengthening residential construction activity in 2004-05, with work done forecast to increase by 12 per cent, after an estimated 6.0 per cent rise in 2003-04. A more balanced housing market should see anticipated increases in demand requiring increased levels of residential construction activity.

With the local economy beginning to pick up, historically weak but strengthening population growth and buoyant employment prospects associated with the commencement of major projects, consumer and investor confidence is improving. A number of large multi-storey apartment complexes are currently under construction, with more planned in 2004-05, predominantly for inner Darwin.

### Major Private Projects

The timing of these projects is important, as they can influence investor confidence in the property market. The recent pick up in other residential building (predominantly units) is set to continue in 2004 and 2005. Construction of the \$45 million 84-unit Hastings over Mindil resort-style complex commenced in early 2004, while the 45 unit Nautilus apartments in Cullen Bay are also underway with a construction cost of around \$10 million.

Other significant privately developed projects planned to commence in 2004-05 include the Synergy Square development off Woods Street in the Darwin CBD to consist of 85-units with an estimated construction cost of \$22 million, and is due to commence later this year, while a 52-unit development costing \$17 million is due to start soon in Stuart Park. There are several other major apartment blocks (estimated construction cost of more than \$20 million) proposed for inner Darwin, including a 90-unit development in Woods Street, a 94-unit complex in Bayview and an 83-unit complex in Carey Street. A 33 level high-rise residential block planned for the Darwin CBD costing around \$45 million to construct is planned to commence in mid 2005, although final approval is dependent upon a number of strict conditions being met.

## Land Availability

Construction of new houses in 2004-05 will be boosted by the release of land in Larapinta, Alice Springs. It is expected that most of the 85 residential blocks proposed for development in the Larapinta area will be built on within 12 months of becoming available. Future availability of land for development in Alice Springs is subject to successful negotiation of ILUAs with traditional owners.

In the rest of the Territory, available land is sufficient for several years of development at current take-up rates. In Darwin, the development of a parcel of land at Lee Point by DHA will make about 350 residential blocks available for private developers, in addition to the 300 blocks to be developed by DHA. Further out, the Palmerston region is best situated to gain from any increase in residential housing construction activity as there is a ready supply of affordable land. Relocation of the Stuart Park fuel tank farm to East Arm will create a significant parcel of prime real estate available for residential development in Darwin by 2007.

## Public Sector Building

Residential construction will be supported by public sector housing construction. IHANT is expected to build approximately 140 new houses during 2004-05 and undertake upgrades and renovations on its other dwelling stock. While the THBS construction program has ended, a significant upgrade program over five years commenced in 2003-04.

## Defence Housing

In line with the defence requirements, DHA's housing program has moderated significantly in recent years, with an emerging trend of upgrading older stock. However, the relocation of the 1st Aviation regiment will require additional housing to be constructed in the short to medium term.

The significant DHA expansion at Lee Point aims to provide around 30 houses by the end of 2005, with a further 270 houses to be constructed in 2006 and beyond.

## Non-residential Construction

In real terms, the combined value of Territory non-residential building and engineering construction, is forecast to increase by 16 per cent to \$2.1 billion in 2004-05. Non-residential building work is forecast to increase by around 60 per cent to \$273 million, while engineering construction is forecast to increase by 11 per cent to \$1.8 billion.

## Non-residential Building

Non-residential building work is forecast to increase by 60 per cent in 2004-05, following a relatively weak period of activity since the defence relocation of the late 1990s. Growth is based on a handful of relatively large projects going ahead in both the private and public sectors, with the largest contribution to growth to come from defence-related investment.

## Defence Projects

There are a number of significant defence projects proposed to commence in mid 2004. Construction of facilities at Robertson Barracks to provide for the relocation of the 1st Aviation Regiment and the accommodation of the Tiger helicopters as well as maintenance, command and training functions will cost around \$75 million. Construction is scheduled to commence in May 2004 and should be finalised by the end of 2005. Work on the next stage of the Bradshaw Field training area is also expected to proceed in May 2004, and although the majority of the \$65 million project is likely to be engineering construction, a significant proportion of non-residential building activity will be included.

Other significant defence projects likely to contribute to growth in 2004-05 include a \$9 million perimeter security fence at the Tindal Base in Katherine, and construction of an \$11 million facility at Darwin Naval Base to house and maintain the fleet of Armidale Class patrol boats arriving in 2005.

Hotel and hospitality investment is forecast to increase slightly in 2004-05 after relatively weak investment in 2003-04. The main contributor to this increase is expected to come from the commencement of construction of the \$100 million Darwin Convention and Exhibition Centre on the waterfront in early 2005. A new \$9 million hotel development close to Darwin International Airport has been proposed, and the 120-150 room complex would be completed by mid 2005 if it proceeds as planned. Smaller proposed hospitality projects include the construction of a motel in Jingili, a sport and recreation resort in the Dundee Beach area and a significant upgrade of the Mitchell Street Holiday Inn.

### Offices Investment

Office investment has increased dramatically in the past few years, notably with the \$65 million Mitchell Centre and the \$22 million TIO office. A relatively high level of office investment should continue in 2004-05, with the planned commencement of Chinatown, which includes 10 000m<sup>2</sup> of office space, while a new development on the Old Admiralty House site will include seven floors of office space. This project has commenced and also includes a residential component.

Unless net absorption picks up, further oversupply in office accommodation in Darwin is likely to develop, resulting in increased vacancy rates, and lower rental yields and values. The Darwin CBD vacancy rate has risen in recent years, and the new, higher-grade office space coming onto the market is likely to attract some existing tenants, leading to an oversupply at the lower end of the market.

### Education Construction

Education related investment is forecast to increase in 2004-05 mainly due to a significant upgrade of Darwin High School worth around \$8 million. Work on the next stage of upgrading and extending Parap Primary School is also proposed, while construction of a new \$10 million secondary facility on the Palmerston campus of Charles Darwin University will commence during 2005. Construction of a cultural and recreational centre in Palmerston is also scheduled to commence during 2005.

### Culture and Recreation

Construction will commence on the \$28 million Desert Knowledge Precinct in Alice Springs in 2004-05, including the Desert People's Centre. The development of the Darwin City Waterfront project, including the estimated \$100 million Darwin Convention and Exhibition Centre, will significantly boost non-residential building activity across the hotel and hospitality, retail and entertainment, and recreation sectors. The total cost of this development is estimated at \$600 million and will include both public and private sector investment.

### Engineering Construction

After relatively stable growth of 6.0 per cent in 2002-03, engineering activity is estimated to have increased by 23 per cent in 2003-04 as the start of construction for Bayu-Undan stage two more than offset the completion of the railway and Bayu-Undan stage one. The forecast for 2004-05 is for a further increase of 11 per cent to \$1.8 billion.

### Major Projects

The Bayu-Undan stage two project will be the main driver of growth in engineering construction in 2004-05, as it enters its peak construction phase. A total of around \$1.4 billion worth of work is estimated to be done in 2004-05, with the vast majority of this to be engineering work.

This medium-term forecast assumes that the proposed expansion of the Alcan alumina refinery at Nhulunbuy will commence in the first half of 2005. The total cost of this expansion is estimated at around \$1.5 billion, with construction to take approximately two and a half years. Two other major engineering projects are strongly connected to the timing of the Alcan expansion. These interrelated projects include a \$500 million trans-Territory pipeline from Wadeye to Nhulunbuy to link into the development of the Blacktip gas field in the southern Bonaparte Gulf and an associated pipeline to Wadeye estimated to cost around \$1 billion. While none of these projects are yet confirmed, if the Alcan expansion proceeds in 2005, engineering construction activity in the Territory will remain at very high levels in the medium term.

#### Public Investment

The roads, highways and subdivisions category should be boosted through the development of new residential subdivisions and significant roads investment in 2004-05. Headworks for the Lee Point development are estimated at close to \$10 million, while work on the new Larapinta development and the Mount Johns Valley subdivision in Alice Springs will also contribute to engineering activity in 2004-05. The sealing of the Mereenie loop road in Central Australia will begin in 2004-05 at a cost of around \$38 million over several years, while the Litchfield loop road sealing will also be undertaken in 2004-05.

Publicly funded engineering investment is set to increase in 2004-05, assuming that the next stage of the \$65 million Bradshaw Field training area proceeds in mid 2004 as planned. A \$13 million bridge and associated infrastructure have already been completed, and the majority of the remaining \$52 million of investment is likely to be engineering construction. Work on stage two of the East Arm Port has taken longer than expected, with a further \$5.5 million of expenditure required to complete the \$93 million project in the second half of 2004. Also at East Arm Port, a \$10 million industrial fuel pipeline is scheduled for installation later in 2004.

The economic base of the Territory is expected to expand significantly over the next decade with Timor Sea gas and mining developments, opportunities associated with the operational phase of the railway, as well as a recovery in tourism growth and further opportunities arising from the defence presence. The commercial and social infrastructure required will result in a major phase of construction activity to support the broadening economic base, with strong growth in residential and non-residential building expected over the medium term.