

Experimental
Estimates of
Gross
Regional
Product



Queensland Government

Treasury

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Abbreviations

ABS	Australian Bureau of Statistics
ANZSIC 2006	Australian and New Zealand Standard Industrial Classification, 2006
ANZSIC 1993	Australian and New Zealand Standard Industrial Classification, 1993
ASGC 2001	Australian Standard Geographical Classification, 2001
ASGC 2006	Australian Standard Geographical Classification, 2006
ASNA	Australian System of National Accounts
COE	Compensation of employees
GDP	Gross Domestic Product
GOS/GMI	Gross Operating Surplus and Gross Mixed Income
GRP	Gross Regional Product
GSP	Gross State Product
GVA	Gross Value Added
QSA	Queensland State Accounts
SD	Statistical Division (used interchangeably with 'region')

1 The Concept of Gross Regional Product

Production is the process whereby labour, capital, land, knowledge and other resources are combined for the provision of goods and services. Examples of services which add to the value of goods include transport and retailing, while those that are directly bought and sold in the market place in their own right include insurance and real estate activity. In addition, some goods and services are provided which do not enter the market such as police and defence services produced by government.

In measuring production activity care must be taken to avoid double counting. Many goods and services are bought by firms for use in their own productive processes. If the value of all goods and services produced in a region were added together, there would be considerable double counting of some goods and services as they proceed through the successive stages of the production process. To avoid this, only the value added at each stage of production should be measured. The sum of the value added for each industry provides a measure of the value of economic production of a national, state or regional economy.

While the gross regional product (GRP) estimates contained in the publication are consistent with data for aggregate gross state product published in *Queensland State Accounts*, the statistics are labelled “experimental” owing to the paucity of economic statistics available at the regional level to assist with more rigorous estimation. As such, extreme care should be taken when interpreting changes at the regional industry level.

1.1 Measurement of Gross Domestic Product

The term gross domestic product (GDP) relates to the Australian economy, gross state product (GSP) refers to the Queensland economy while gross regional product (GRP) is used for output at the sub-state level. For the purposes of this publication, GRP will relate to the statistical divisions (SD) of Queensland.

GDP at market prices is defined as “the total market value of goods and services produced in Australia after deducting the costs of goods used up in the process of production (intermediate consumption), but before deducting consumption of fixed capital (depreciation)”¹.

Three approaches are commonly used to measure GDP at market prices:

- the income approach;
- the expenditure approach; and
- the production approach.

The **income approach** measures GDP by adding the income generated by employees, government and firms. That is, wages paid by business to its employees, the taxes on products and production paid to government and the balance, gross operating surplus and gross mixed income, which can be allocated to the owners of the business (for example, to maintain capital equipment and pay interest on loans). Gross operating surplus and gross mixed income is the excess of gross output of firms over the cost incurred in producing that output, but before adjusting for consumption of fixed capital (that is, depreciation), dividends, interest, royalties and land rent paid and direct tax payable.

¹ ABS 1301.0

The **expenditure approach** measures final expenditure in the economy, plus exports and minus imports. Final expenditure on private consumption (food, clothing, cars etc), public consumption (day to day running costs of government departments), investment expenditure by private business and government, and changes in inventories.

The **production approach** measures the market value of goods and services produced by industries, less the costs of goods and services used by these industries in the productive process (that is, intermediate consumption).

The Australian Bureau of Statistics (ABS) publishes estimates of GDP for Australia using each of the above approaches. Further details on the compilation of GDP can be found in the ABS publication *Australian National Accounts: Concepts, Sources and Methods* (ABS 5216.0).

1.2 Measurement of Gross State Product

The *Queensland State Accounts*, published quarterly by the Queensland Treasury, extends the information published by the ABS in the *Australian National Accounts* series through the addition of estimates of trade in goods and services, including tourism transactions, to produce a quarterly estimate of GSP. This provides a more comprehensive understanding of Queensland's economic performance.

Estimates of GSP for Queensland are published on an annual basis by the ABS in the *Australian National Accounts*, using the income, expenditure and production approach. The ABS also provides, on an annual basis, an industry dissection of GSP at factor income and gross value added (GVA).

1.3 Measurement of Gross Regional Product

Estimates of GRP examine growth in the components of the regional economies of Queensland. The comparison of these estimates across time shows structural change. The estimates are indicative of the relative contributions of regions to the State and the relative contributions of industries to each region's economy. The main purpose of producing GRP estimates is to account for the diversity in the structure and performance across the regions of Queensland.

Estimates of GRP are produced by summing the income components of GRP: compensation of employees, gross operating surplus, and gross mixed income, to derive total factor income. Total factor income is then converted to GVA by adding taxes less subsidies on production. The sum of GVA across all industries plus taxes less subsidies on products equals GRP.

Whilst it is feasible to estimate GRP in this manner, industry analysis is done using GVA as there is no adequate method to allocate taxes less subsidies on products across industries on a sub-state basis. This is because taxes less subsidies on products are shown as being paid by the users of the products on which the taxes are levied and not by specific industries. For this reason, GVA estimates are used to analyse the industry contributions to regional production in this publication.

Estimates of GVA for each of the 18 industries are provided at industry division level based on the ANZSIC 1993. These industries are:

1. Agriculture, forestry and fishing;
2. Mining;
3. Manufacturing;
4. Electricity, gas and water supply;
5. Construction;
6. Wholesale trade;
7. Retail trade;
8. Accommodation, cafés and restaurants;
9. Transport and storage;
10. Communication services;
11. Finance and insurance;
12. Property and business services;
13. Government administration and defence;
14. Education;
15. Health and community services;
16. Cultural and recreational services;
17. Personal and other services; and
18. Ownership of dwellings².

For some industries, the compilation of GVA and its indicators are done at the industry subdivision, group or class level and then aggregated to the division level. For example, within the accommodation, cafes and restaurants industry, indicators were used, specific to each of the four subdivisions, to increase the reliability of estimates.

Aggregate estimates of GRP for Queensland's SDs are presented in current price and chain volume measure (CVM) or real terms. Commentary within regions analyses industry composition at current prices. The changing industry composition of a region therefore includes price movements.

Average annual growth is calculated from CVM estimates of GRP. In this way, real growth in GRP is reported with the impact of price movements removed from the estimates. For more information on using current prices and CVM refer to Glossary of Terms.

1.4 Other regional data products and services

OESR specialises in providing data and information at the local level through:

- Regional Statistical Liaison Officers located in regional Queensland; and
- Easy to use on-line information tools for extracting regional data.

Regional Statistical Liaison Officers

- Based locally in Cairns, Townsville, Rockhampton and Brisbane.
- Provide advice on how and where to find regional data, and how to best use these data.
- Deliver statistical training on how to use regional data.
- Undertake statistical consultancy services on a fee-for-service basis.
- Facilitate Statistical Liaison Officer (SLO) networks.

² Ownership of Dwellings is an artificial industry created to measure the gross rent of dwellings (actual rent paid in the case of tenanted dwellings and an imputed rent for owner-occupied dwellings).

To find out more:

In the **Far North** region
contact Liesl Harrold in Cairns
phone 07 4039 8804 or email liesl.harrold@treasury.qld.gov.au

In the **Northern, North West** and **Mackay** regions
contact Ken Melchert in Townsville
phone 07 4760 7650 or email kenneth.melchert@treasury.qld.gov.au

In the **Fitzroy** and **Central West** regions
contact Alex Tracey in Rockhampton
Phone 07 4938 4486 or email alex.tracey@treasury.qld.gov.au

In **South East, Wide Bay–Burnett, Darling Downs** and **South West** regions
contact Angela Lazzaro in Brisbane
Phone 07 3224 2576 or email angela.lazzaro@treasury.qld.gov.au

Tools for easy access to regional data

Queensland Regional Profiles

The Queensland Regional Profiles are dynamic statistical reports based on the latest regional data available. Simply select a region (statistical division or local government area – both pre- and post-reform LGAs available), then submit to produce a comprehensive socio-economic profile. Multiple regions, forming catchments of interest, can also be selected. A range of topics are presented including population, building approvals, tourist accommodation, school students and the labour force.

Please visit www.oesr.qld.gov.au and follow the **Qld Regional Profiles** link.

Queensland Regional Statistical Information System (QRSIS)

A large regional database designed to provide easy and immediate access to various time-series collections of economic, social and demographic data for Queensland regions. QRSIS holds the most recent statistical information available from a range of Australian and State Government sources, including the Australian Bureau of Statistics. QRSIS is immediately updated with the release of contemporary statistics and revisions. QRSIS generated tables can be printed, saved or copied and pasted into other applications for further analysis.

Please visit www.oesr.qld.gov.au and follow the **QRSIS** link.

Thematic Maps of Queensland

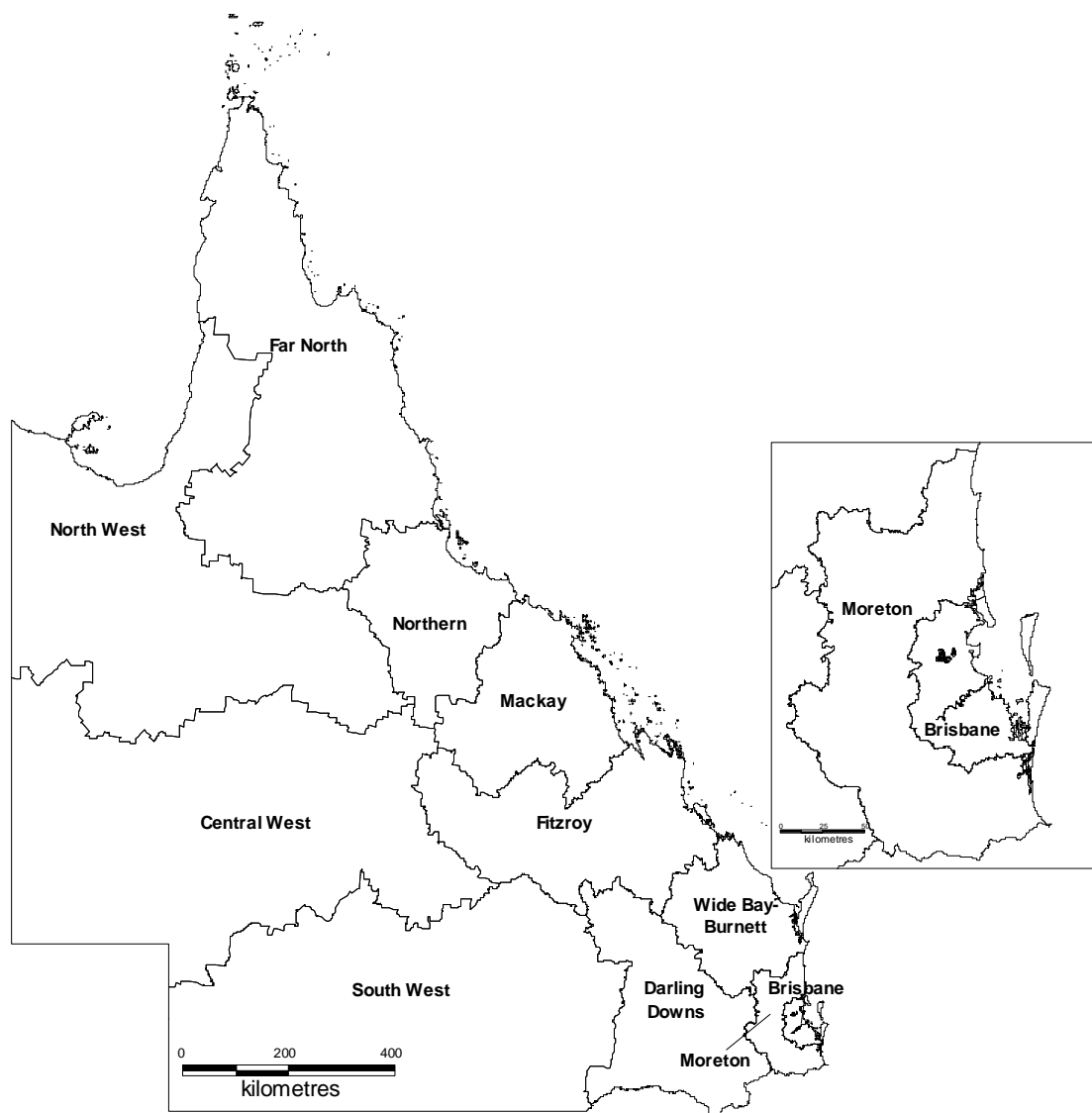
The Thematic Maps of Queensland provide a unique and informative geographical representation of the state's economy, people and regions. Thematic maps allow for quick identification of data relationships and comparisons between small areas. Characteristics, such as persons aged 65 and over, gross value of crops, non-residential buildings approved and persons born overseas, can be viewed and analysed thematically for small areas in Queensland.

Please visit www.oesr.qld.gov.au and follow the **Thematic Maps** link.

2 Queensland's regions

The regions used in the analysis correspond to the Statistical Divisions (SDs) of Queensland as defined by the Australian Standard Geographical Classification (ASGC). The 2000-01 estimates presented in this publication align with the SD boundaries set out in ASGC 2001 while the 2005-06 estimates are presented using ASGC 2006.

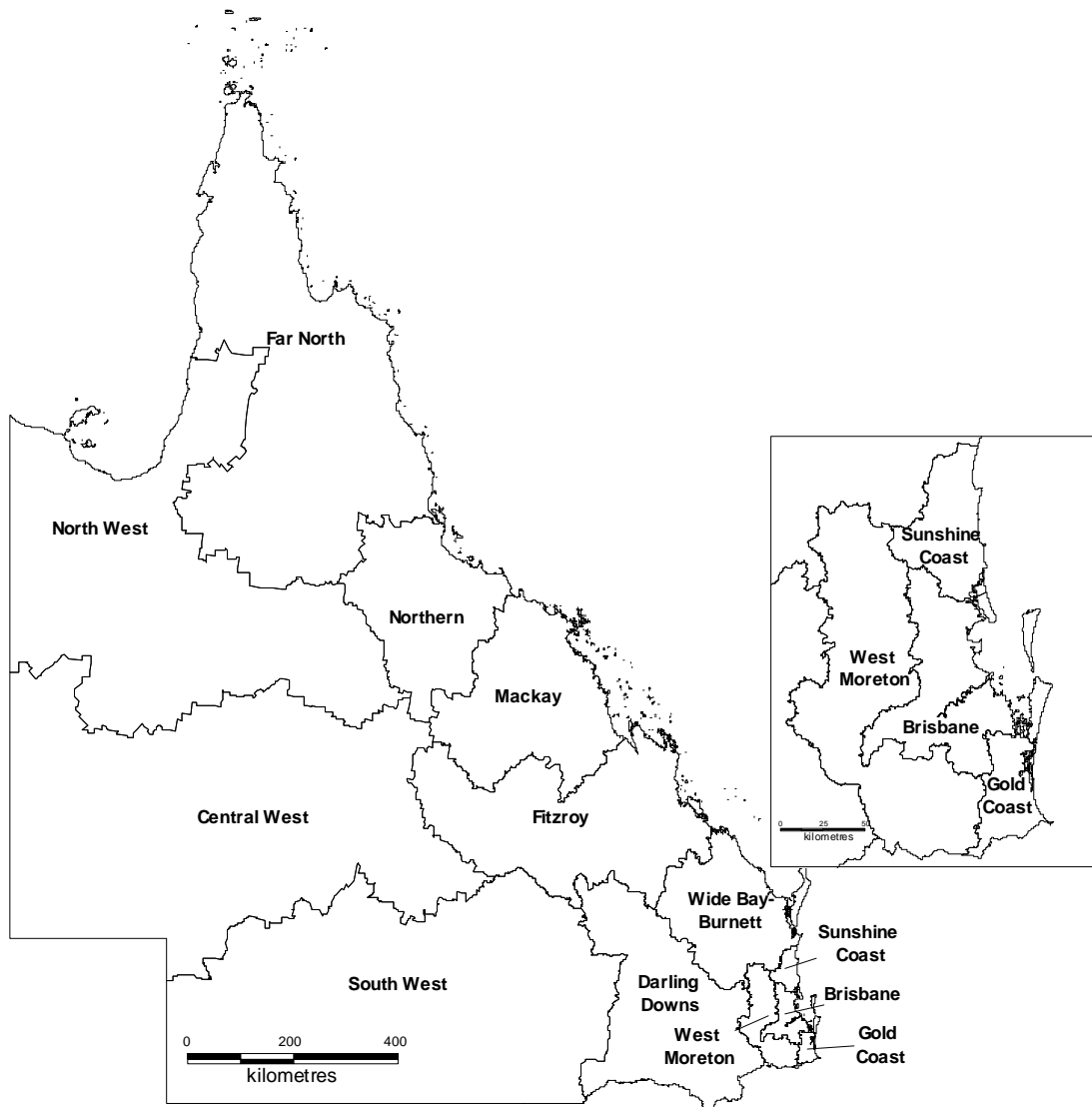
Figure 1: Queensland's Regions by ASGC 2001 Statistical Divisions



The significant difference between ASGC 2001 and ASGC 2006 involves the disaggregation of Brisbane and Moreton SDs to Brisbane, Gold Coast, Sunshine Coast and West Moreton SDs.

While estimates are provided for Brisbane and Moreton SDs, caution should be used when interpreting these estimates due to the change in the ASGC. The Brisbane SD now includes an area west of Ipswich which previously was included in Moreton, and now excludes an area north of the Gold Coast which was previously included in Brisbane. Estimates for 2005-06 of 'Moreton' are an aggregation of Gold Coast, Sunshine Coast and West Moreton and are not directly comparable to the 2000-01 estimates of the Moreton SD due to these boundary changes.

Figure 2: Queensland's Regions by ASGC 2006 Statistical Divisions



For the purpose of analysis and comparability between 2000-01 and 2005-06 a South East Queensland region has been created from aggregating Brisbane and Moreton SDs for 2000-01 and Brisbane, Gold Coast, Sunshine Coast and West Moreton SDs for 2005-06. This broader South East Queensland region is largely consistent between the two versions of ASGC. In order to increase accuracy, South East Queensland should be used when comparing estimates across the two periods

The local government reforms introduced by the Queensland Government in 2008 have necessitated a number of changes to be incorporated into the 2008 edition of the Australian Standard Geographical Classification (ASGC) (cat. 1216.0). Many of the changes relate to re-naming areas and allocating new ASGC codes to reflect the new local government names and structure. Some of the reforms, however, will require the ABS make changes to the boundaries of higher-level geographies such as Statistical Divisions.

For further information on the ASGC and general principles surrounding the various spatial units please see: <http://www.abs.gov.au/ausstats/abs@.nsf/mf/1216.0>.

3 Gross Regional Product

This section incorporates discussion based on the two methods of presenting estimates of GRP. First is analysis based on estimates of GRP at current prices (or nominal GRP), that is, before the effects of price movements have been removed. Second is analysis of GRP estimates which are based on chain volume measures (or real GRP) which removes the impact of price movements. GRP per capita estimates are also discussed in real terms.

3.1 Nominal Gross Regional Product

In 2005-06, Queensland's GSP totalled \$184.0 billion and recorded average annual growth of 9.9 per cent over the five years to 2005-06. The average annual growth of Rest of Australia during the same period was 6.4 per cent with Gross Rest of Australia Product of \$783.5 billion.

The four regions making up South East Queensland accounted for \$114.7 billion in 2005-06, representing 62.3 per cent of Queensland's total GSP. Brisbane accounted for 46.4 per cent of Queensland's GSP of \$184.0 billion, down from a 47.6 per cent share in 2000-01. Moreton accounted for a higher percentage of GSP in 2005-06 with 16.0 per cent, up from 15.2 per cent in 2000-01. Mackay and Fitzroy were the only other regions of Queensland to increase their share of GSP over the five years to 2005-06, up 2.4 percentage points and 0.8 percentage point to 7.4 per cent and 7.7 per cent respectively.

Table 1: Nominal GRP, Queensland
Current prices

Region	2000-01	2005-06	Average annual growth
	\$m	\$m	Per cent
Brisbane	54,617	85,317	9.3
Gold Coast	na	18,340	na
Sunshine Coast	na	9,375	na
West Moreton	na	1,642	na
Moreton(a)	17,410	29,357	11.0
<i>South East Queensland</i>	<i>72,027</i>	<i>114,674</i>	<i>9.7</i>
Wide Bay-Burnett	5,380	7,815	7.8
Darling Downs	6,124	9,119	8.3
South West	1,342	1,663	4.4
Fitzroy	7,913	14,126	12.3
Central West	629	557	-2.4
Mackay	5,773	13,698	18.9
Northern	5,800	8,557	8.1
Far North	6,566	9,055	6.6
North West	3,130	4,719	8.6
Total Queensland	114,684	183,983	9.9
Rest of Australia	574,579	783,471	6.4

(a) In 2005-06 Moreton is the sum of Gold Coast, Sunshine Coast and West Moreton
na not available

Average annual growth in the regions can be classified into three broad categories:

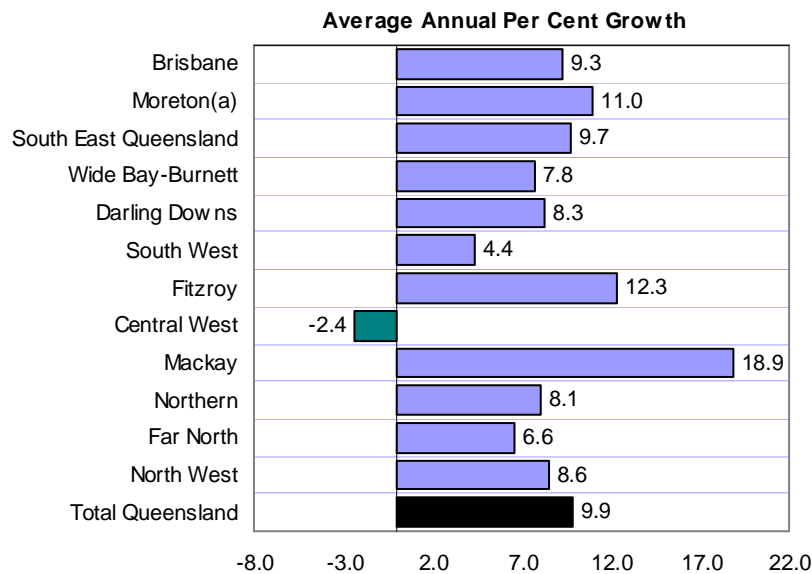
- high growth, that is, growth above nominal GSP growth;
- medium growth, that is, growth comparable to GSP growth and;
- low growth, that is, growth less than nominal GSP growth.

High growth regions were Mackay, the fastest growing region of Queensland between 2000-01 and 2005-06 with average annual growth of 18.9 per cent, Fitzroy which recorded average annual growth of 12.3 per cent and Moreton with average annual growth of 11.0 per cent.

Medium growth regions included Brisbane, North West and Darling Downs which experienced average annual growth over the five years to 2005-06 of 9.3 per cent, 8.6 per cent and 8.3 per cent respectively. The Northern and Wide Bay-Burnett regions also recorded medium average annual growth rates of 8.1 per cent and 7.8 per cent respectively.

Low growth was recorded in Far North and South West with average annual growth of 6.6 per cent and 4.4 per cent respectively. Central West experienced a contraction in GRP with an average annual decline of 2.4 per cent between 2000-01 and 2005-06.

Figure 3: Growth in Nominal GRP, 2000-01 to 2005-06, Queensland
Current prices



(a) In 2005-06 Moreton is the sum of Gold Coast, Sunshine Coast and West Moreton

3.2 Real Gross Regional Product (CVM)

When analysing economic growth it is useful to adjust for price movements. By removing price movements, a measure of the volume of production is obtained to inform on whether an industry or region is expanding its production. Chain volume measures are used here to analyse real growth in addition to the nominal data presented above.

In real terms, Queensland recorded average annual growth of 4.8 per cent over the five years to 2005-06.

Table 2: Real GRP, Queensland

Chain volume measures (\$, 2005-06)

Region	2000-01	2005-06	Average annual growth
	\$m	\$m	Per cent
Brisbane	65,482	85,317	5.4
Gold Coast	na	18,340	na
Sunshine Coast	na	9,375	na
West Moreton	na	1,642	na
Moreton(a)	20,745	29,357	7.2
<i>South East Queensland</i>	<i>86,227</i>	<i>114,674</i>	<i>5.9</i>
Wide Bay-Burnett	6,545	7,815	3.6
Darling Downs	7,385	9,119	4.3
South West	1,876	1,663	-2.4
Fitzroy	12,041	14,126	3.2
Central West	774	557	-6.4
Mackay	10,468	13,698	5.5
Northern	7,526	8,557	2.6
Far North	8,042	9,055	2.4
North West	4,745	4,719	-0.1
Total Queensland	145,629	183,983	4.8
Rest of Australia	674,929	783,471	3.0

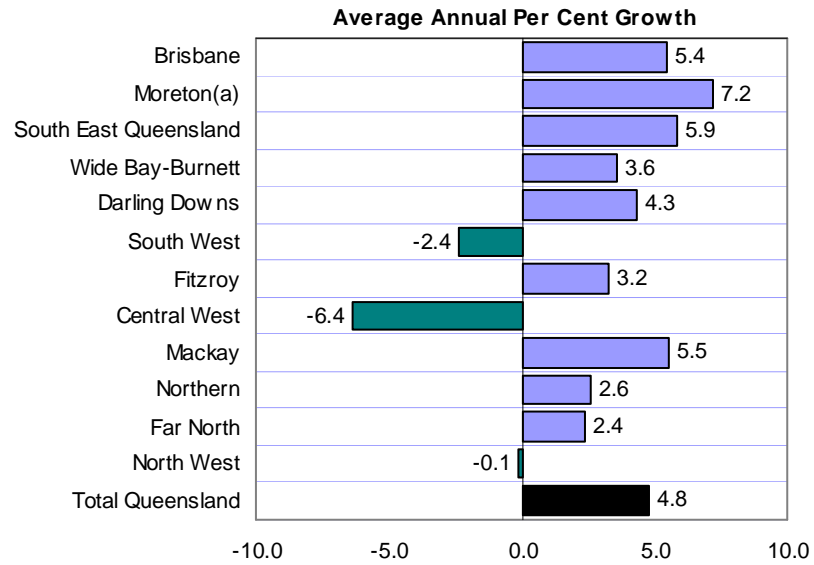
(a) In 2005-06 Moreton is the sum of Gold Coast, Sunshine Coast and West Moreton
na not available

Moreton was the fastest growing region in Queensland between 2000-01 and 2005-06 with real average annual growth of 7.2 per cent. Growth significantly faster than GSP was also experienced in the Mackay and Brisbane regions with average annual growth of 5.5 per cent and 5.4 per cent respectively.

Darling Downs and Wide Bay-Burnett experienced a medium level of growth over the five years to 2005-06 with comparable growth in real GSP. These two regions recorded 4.3 per cent and 3.6 per cent average annual growth respectively.

Average annual growth significantly below that of real GSP was recorded in Fitzroy with 3.2 per cent, Northern with 2.6 per cent and Far North with 2.4 per cent. North West was one of three regions to contract in the five years to 2005-06 with an average annual decline of 0.1 per cent. South West also experienced a decrease in real GRP over the five years, down 2.4 per cent in average annual terms, while Central West recorded the largest contraction in real GRP with an average annual decline of 6.4 per cent.

Figure 4: Growth in Real GRP, 2000-01 to 2005-06, Queensland
Chain volume measures (\$, 2005-06)



(a) In 2005-06 Moreton is the sum of Gold Coast, Sunshine Coast and West Moreton

3.3 Real Gross Regional Product Per Capita

Population can be reported as a key standard base for economic production in an attempt to 'normalise' data into more comparable results. Changes in population play a key role in determining changes in a region's productive capacity. For this reason, it is useful to consider population changes over time when comparing GRP. In effect, per capita measures remove the impact of population growth as a driver of economic growth.

Table 3 outlines Queensland's population by region for the years 2000-01 and 2005-06 and the average annual growth between these years. Population data are from ABS' Estimated Resident Population. An average of the 30 June estimates for 2000 and 2001 has been used for 2000-01 and an average of 2005 and 2006 for 2005-06.

Table 3: Population by Region, Queensland

Region	2000-01	2005-06	Average annual growth
	Persons	Persons	Per cent
Brisbane	1,634,851	1,803,240	2.0
Gold Coast	na	509,249	na
Sunshine Coast	na	290,775	na
West Moreton	na	71,859	na
Moreton(a)	713,104	871,883	4.1
<i>South East Queensland</i>	<i>2,347,955</i>	<i>2,675,123</i>	<i>2.6</i>
Wide Bay-Burnett	234,903	265,224	2.5
Darling Downs	208,856	225,017	1.5
South West	26,850	26,462	-0.3
Fitzroy	181,070	198,244	1.8
Central West	12,490	11,661	-1.4
Mackay	136,938	156,965	2.8
Northern	188,801	207,173	1.9
Far North	221,557	244,921	2.0
North West	35,823	33,268	-1.5
Total Queensland	3,595,243	4,044,058	2.4
Rest of Australia	15,247,205	15,950,754	0.9

Source: ABS *Estimated Residential Population*

(a) In 2005-06 Moreton is the sum of Gold Coast, Sunshine Coast and West Moreton
na not available

Average annual growth in population for Queensland was 2.4 per cent between 2000-01 and 2005-06, an overall increase of 448,815 residents. Rest of Australia average annual growth in population over the same period was 0.9 per cent.

The fastest population growth region over the five years was Moreton with average annual growth of 4.1 per cent. Other regions with fast population growth included Mackay and Wide Bay-Burnett with 2.8 per cent and 2.5 per cent respectively, while Brisbane and Far North each recorded 2.0 per cent average annual growth. Solid population growth was also recorded in Northern, Fitzroy and Darling Downs with 1.9 per cent, 1.8 per cent and 1.5 per cent average annual growth respectively.

The western regions of Queensland recorded a smaller population base in 2005-06 compared with 2000-01, with an average annual decline of 0.3 per cent for South West, 1.4 per cent for Central West and 1.5 per cent for North West.

Table 4 presents estimates of real GRP per capita. These are based on the real GRP and population data presented in Table 2 and 3 respectively. As these estimates are based on real GRP, any price movements which have occurred over the period are removed. As such, these estimates reflect the underlying volume of output produced per capita.

Table 4: Levels and Growth of Real GRP per capita, Queensland
Chain volume measures (\$, 2005-06)

Region	2000-01	2005-06	Average annual growth
	\$	\$	Per cent
Brisbane	40,054	47,313	3.4
Gold Coast	na	36,014	na
Sunshine Coast	na	32,241	na
West Moreton	na	22,850	na
Moreton(a)	29,091	33,671	3.0
<i>South East Queensland</i>	<i>36,724</i>	<i>42,867</i>	<i>3.1</i>
Wide Bay-Burnett	27,863	29,466	1.1
Darling Downs	35,359	40,526	2.8
South West	69,870	62,845	-2.1
Fitzroy	66,499	71,256	1.4
Central West	61,970	47,766	-5.1
Mackay	76,443	87,268	2.7
Northern	39,862	41,304	0.7
Far North	36,298	36,971	0.4
North West	132,457	141,848	1.4
Total Queensland	40,506	45,495	2.4
Rest of Australia	44,266	49,118	2.1

(a) In 2005-06 Moreton is the sum of Gold Coast, Sunshine Coast and West Moreton
na not available

Queensland's real GSP per capita recorded an average annual growth of 2.4 per cent between 2000-01 and 2005-06. This was 0.3 percentage point above growth in the of Rest of Australia which recorded 2.1 per cent average annual growth.

The highest average annual growth in real GRP per capita over the five years to 2005-06 was in the region of Brisbane, with 3.4 per cent. This was followed by Moreton with 3.0 per cent, Darling Downs with 2.8 per cent while Mackay experienced 2.7 per cent average annual growth in GRP per capita.

Central West and South West GRP per capita decreased between 2000-01 and 2005-06 with average annual declines of 5.1 per cent and 2.1 per cent respectively.

4 Gross Value Added by Industry

4.1 State Level

The industry composition of nominal gross value added in Queensland for the years 2000-01 and 2005-06 is presented in Table 5.

In 2005-06 the mining industry was the largest contributor to the Queensland economy, accounting for 10.6 per cent of total nominal GVA. Mining also had the largest increase in nominal GVA share in the five years to 2005-06, rising 4.5 percentage points on 2000-01 when it was the seventh largest industry in Queensland. This movement reflects the strong growth in commodity prices received in the mining industry over this period.

Table 5: Composition of Gross Value Added, Queensland

Current prices

Total QLD	Composition		Change in
	2000-01	2005-06	Composition
	Per cent	Per cent	Percentage points
Agriculture, forestry and fishing	4.4	3.4	-1.0
Mining	6.1	10.6	4.5
Manufacturing	11.2	9.8	-1.4
Electricity, gas and water	2.2	2.1	-0.1
Construction	6.4	7.9	1.5
Wholesale trade	5.5	4.9	-0.6
Retail trade	8.0	7.5	-0.5
Accommodation, cafes and restaurants	3.5	2.9	-0.6
Transport and storage	5.9	6.0	0.1
Communication services	3.1	2.3	-0.8
Finance and insurance	5.0	5.2	0.2
Property and business services	10.6	10.0	-0.6
Government administration and defence	4.6	4.7	0.1
Education	5.2	4.7	-0.5
Health and community services	6.3	6.3	0.0
Cultural and recreational services	1.2	1.3	0.1
Personal and other services	2.4	2.3	-0.1
Ownership of dwellings	8.6	8.3	-0.3
Gross Value Added	100.0	100.0	

Property and business services remains the second largest contributor, accounting for 10.0 per cent of total nominal GVA in 2005-06. This is despite property and business services' share of nominal GVA decreasing 0.6 percentage point from 10.6 per cent in 2000-01.

Manufacturing is still a large contributor to the Queensland economy, accounting for 9.8 per cent of economic activity, although down from its 11.2 per cent contribution in 2000-01.

Queensland's population increase (average annual growth of 2.4 per cent over the five years to 2005-06, see Table 3 above) coupled with strong growth in the resource sector has seen a subsequent boom in the demand for housing and non-dwelling construction. The construction industry recorded the second largest change in the share of nominal GVA, rising 1.5 percentage points to 7.9 per cent in 2005-06.

Agriculture, forestry and fishing experienced a decline in its contribution to Queensland's economic activity from 4.4 per cent in 2000-01 to 3.4 per cent in 2005-06.

Figure 5 shows the growth in real terms after adjusting for price movements for each industry in Queensland. High growth industries between 2000-01 and 2005-06 include finance and insurance (9.4 per cent), construction (8.8 per cent), and property and business services (7.3 per cent). Culture and recreational services with 6.3 per cent and communication services with 6.2 per cent also recorded strong growth.

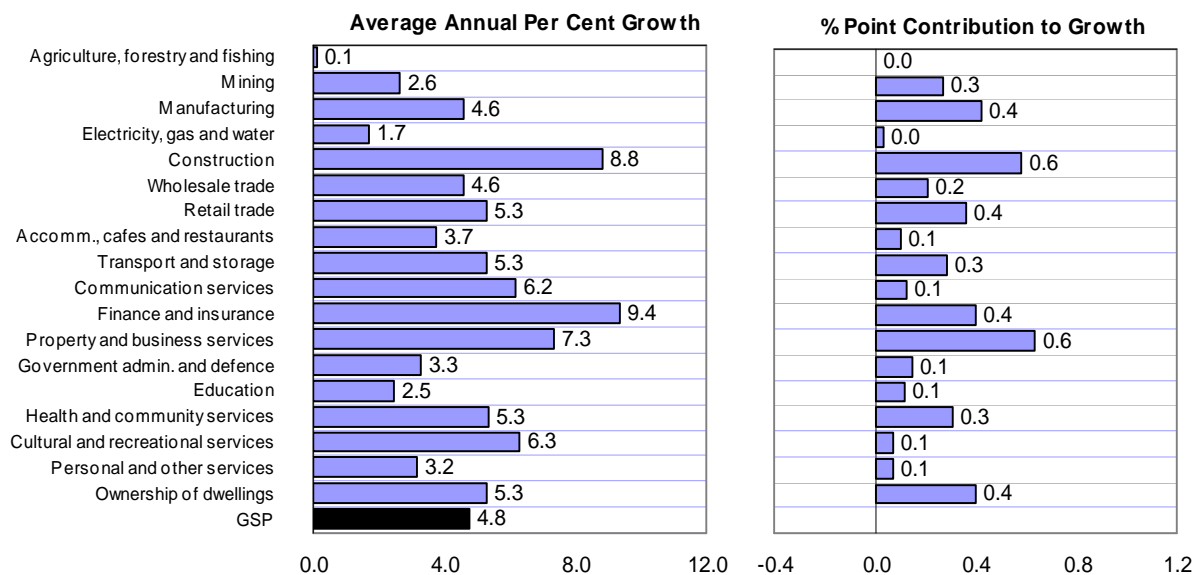
Low growth industries included agriculture, forestry and fishing (0.1 per cent), electricity, gas and water (1.7 per cent), education (2.5 per cent) and mining (2.6 per cent). The difference between the mining industry's high growth rate in nominal terms and low growth rate in real terms is explained by the large commodity price increases in the resource sector over the period. While the income received for mining products has risen sharply, the underlying volume of production has grown at a more moderate rate.

The largest contributors to growth over the period were construction and property and business services, both of which contributed 0.6 percentage point. Manufacturing, retail trade, finance and insurance, and ownership of dwellings each contributed 0.4 percentage point to aggregate growth in real GVA.

The mining, transport and storage, and health and communication industries each contributed 0.3 percentage point over the five years to 2005-06. All other industries made a neutral or marginal contribution to growth between 2000-01 and 2005-06.

Figure 5: Growth in Real GVA, 2000-01 to 2005-06, Queensland

Chain volume measures (\$, 2005-06)



4.2 Regional Level

4.2.1 South East Queensland

South East Queensland includes Brisbane and Moreton in 2000-01 and Brisbane, Gold Coast, Sunshine Coast and West Moreton in 2005-06. Because of the change from ASGC 2001 to ASGC 2006 the boundary of Brisbane changed from 2000-01 to 2005-06. Therefore, figures for South East Queensland (for which the border remains unchanged across the two ASGC classifications) are most appropriate for comparing movements across the period.

In real terms, economic activity in South East Queensland grew by an average annual rate of 5.9 per cent over the five years to 2005-06, 1.1 percentage points above Queensland's average annual economic growth of 4.8 per cent.

Industry Composition

Table 6 highlights the industry composition of South East based on current price estimates of GVA. In 2005-06, the major industries in South East Queensland were property and business services, manufacturing and ownership of dwellings, composing 12.9 per cent, 11.1 per cent and 9.7 per cent respectively.

Table 6: Composition of Gross Value Added³, South East Queensland
Current prices

South East Queensland	Composition		Change in Composition Percentage points
	2000-01	2005-06	
	Per cent	Per cent	
Agriculture, forestry and fishing	1.0	0.7	-0.3
Mining	0.6	0.6	0.0
Manufacturing	12.4	11.1	-1.3
Electricity, gas and water	1.5	1.6	0.1
Construction	6.6	8.5	1.9
Wholesale trade	6.0	5.8	-0.2
Retail trade	8.6	8.4	-0.2
Accommodation, cafes and restaurants	3.5	3.1	-0.4
Transport and storage	6.0	6.5	0.5
Communication services	3.6	2.8	-0.8
Finance and insurance	6.3	6.7	0.4
Property and business services	13.3	12.9	-0.4
Government administration and defence	4.6	5.0	0.4
Education	5.4	5.1	-0.3
Health and community services	6.8	7.2	0.4
Cultural and recreational services	1.5	1.6	0.1
Personal and other services	2.7	2.6	-0.1
Ownership of dwellings	9.6	9.7	0.1
Gross Value Added	100.0	100.0	

Strong growth in the construction industry led to an increase in its share of nominal GVA from 6.6 per cent in 2000-01 to 8.5 per cent in 2005-06. This increase of 1.9 percentage points was the largest change in composition across industries. Manufacturing accounted for the largest decline in share of nominal GVA, down 1.3 percentage points from 12.4 per cent in 2000-01.

³ GVA is used to analyse industry contributions to regional production as there is no adequate method to allocate taxes less subsidies on products across industries.

Growth in Real GVA

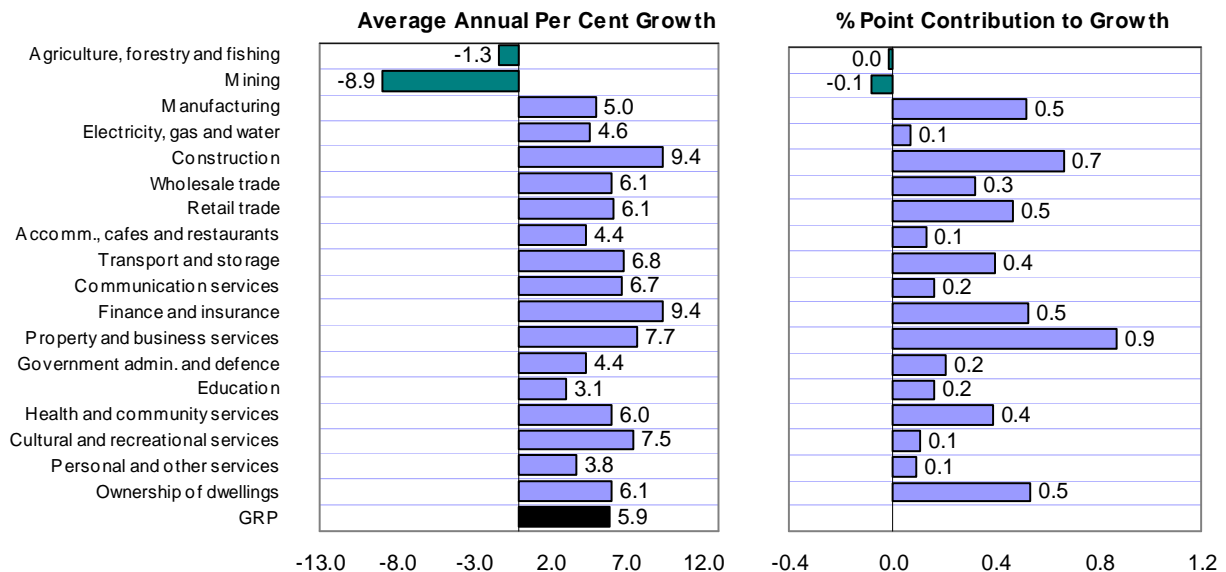
While the above discussion focuses on the current price industry composition of South East Queensland, Figure 6 presents average annual growth in real GVA by industry and each industry's contribution to regional growth.

Average annual growth in real GRP in South East Queensland was 5.9 per cent between 2000-01 and 2005-06. The fastest growing industries in South East Queensland over this period were construction, and finance and insurance, both recording 9.4 per cent average annual growth. These were followed by property and business services with 7.7 per cent and cultural and recreational services with 7.5 per cent. The mining industry accounts for just 0.6 per cent of the South East Queensland economy and its decline had little impact on growth in the region.

The main contributing industries over the period were property and business services with 0.9 percentage point and construction with 0.7 percentage point contributions. Manufacturing, retail trade, finance and insurance, and ownership of dwellings each contributed 0.5 percentage point to overall growth in South East Queensland. Agriculture, forestry and fishing had a neutral impact on growth in South East Queensland.

Figure 6: Growth in Real GVA, 2000-01 to 2005-06, South East

Chain volume measures (\$, 2005-06)



4.2.2 Wide Bay-Burnett

In real terms, Wide Bay-Burnett grew by 3.6 per cent between 2000-01 and 2005-06, the fifth fastest growing region in Queensland.

Industry Composition

Table 7 shows the industry composition of the Wide Bay-Burnett economy based on current price estimates of GVA. The largest industry contributions in the region came from ownership of dwellings, manufacturing, and agriculture, forestry and fishing which accounted for 10.6, 10.4 and 9.7 per cent of nominal GVA respectively. Retail trade was also a key industry in the region, comprising 9.2 per cent of total nominal GVA.

The largest compositional change was shown in the construction industry with an increase of 2.1 percentage points from the previous period while the agriculture, forestry and fishing industry share declined 1.9 percentage points over the period.

The decline in the share of nominal GVA in electricity, gas and water reflects a fall in profits arising from higher coal prices and lower prices received for electricity.

Table 7: Composition of Gross Value Added, Wide Bay-Burnett
Current prices

Wide Bay-Burnett	Composition		Change in Composition Percentage points
	2000-01	2005-06	
	Per cent	Per cent	
Agriculture, forestry and fishing	11.6	9.7	-1.9
Mining	2.4	3.0	0.6
Manufacturing	10.9	10.4	-0.5
Electricity, gas and water	5.5	4.1	-1.4
Construction	6.3	8.4	2.1
Wholesale trade	4.4	3.8	-0.6
Retail trade	9.2	9.2	0.0
Accommodation, cafes and restaurants	3.5	3.5	0.0
Transport and storage	4.6	4.5	-0.1
Communication services	2.6	2.2	-0.4
Finance and insurance	3.0	3.4	0.4
Property and business services	6.0	6.4	0.4
Government administration and defence	3.7	3.9	0.2
Education	6.3	6.1	-0.2
Health and community services	7.4	7.9	0.5
Cultural and recreational services	0.8	0.7	-0.1
Personal and other services	2.0	2.2	0.2
Ownership of dwellings	9.9	10.6	0.7
Gross Value Added	100.0	100.0	

Growth in Real GVA

While the above discussion focuses on the current price industry composition of Wide Bay-Burnett, Figure 7 presents average annual growth in real GVA by industry and each industry's contribution to regional growth.

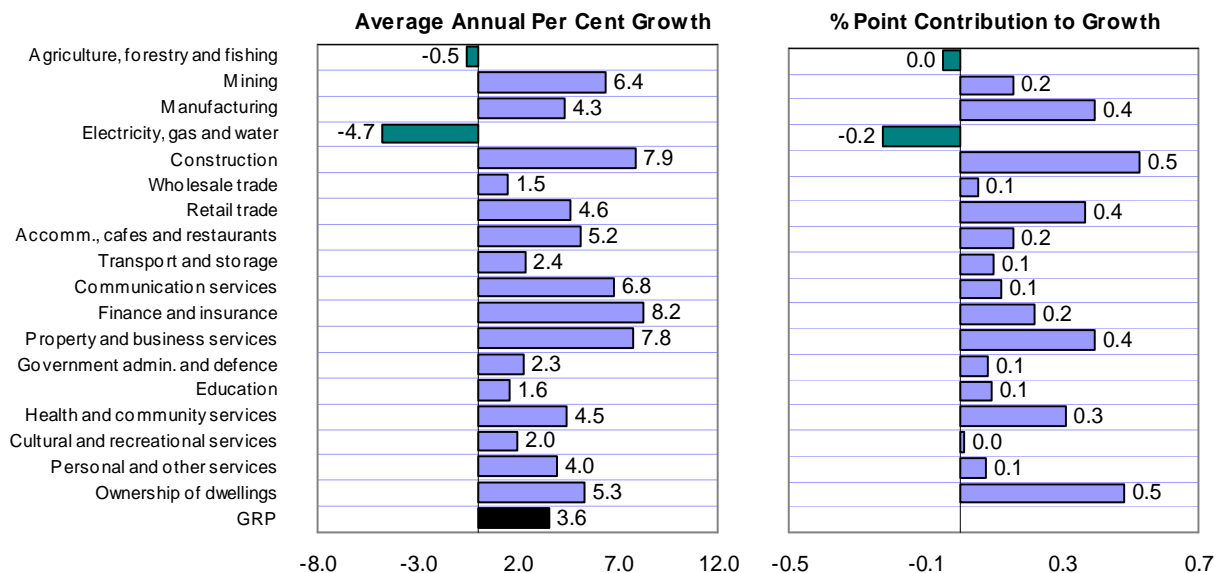
The 3.6 per cent growth in GRP in the five years to 2005-06 follows all industries experiencing average annual growth, with the exception of electricity, gas and water and agriculture, forestry and fishing which declined 4.7 per cent and 0.5 per cent respectively.

Finance and insurance was the fastest growing industry in Wide Bay-Burnett with 8.2 per cent while the construction industry experienced average annual growth of 7.9 per cent. Construction was also one of the highest contributors towards growth in Wide Bay-Burnett adding 0.5 percentage point along with ownership of dwellings. Manufacturing, retail trade, and property and business services each contributed 0.4 percentage point to growth in the Wide Bay-Burnett region.

With respect to electricity, gas and water while GVA in nominal terms rose over the period at an average annual rate of 1.9 per cent, the ABS state average implicit price deflator used for this industry implies a real decline in GVA. This highlights the challenges in producing estimates at a regional level where specific are indicators are not available.

Figure 7: Growth in Real GVA, 2000-01 to 2005-06, Wide Bay-Burnett

Chain volume measures (\$, 2005-06)



4.2.3 Darling Downs

In real terms, Darling Downs recorded average annual growth of 4.3 per cent over the five years to 2005-06. This was the fourth fastest growing region in Queensland, slightly behind the State average growth of 4.8 per cent.

Industry Composition

Table 8 shows the industry composition of the Darling Downs economy based on current price estimates of GVA. Agriculture, forestry and fishing was the most significant industry in the region, making up 15.4 per cent of nominal GVA (unchanged from the previous period). Manufacturing made up 10.7 per cent of nominal GVA, while retail trade was the next highest at 8.2 per cent, down 0.2 percentage point from 2000-01.

The largest change in composition was seen in the mining industry, increasing by 2.5 percentage points from 2000-01. Starting from a low base at the beginning of the period, this mostly reflects average annual volume growth of 51.1 per cent over the five years to 2005-06.

Table 8: Composition of Gross Value Added, Darling Downs

Current prices

Darling Downs	Composition		Change in Composition Percentage points
	2000-01	2005-06	
	Per cent	Per cent	
Agriculture, forestry and fishing	15.4	15.4	0.0
Mining	0.7	3.2	2.5
Manufacturing	11.5	10.7	-0.8
Electricity, gas and water	1.3	2.8	1.5
Construction	6.5	7.1	0.6
Wholesale trade	5.8	4.5	-1.3
Retail trade	8.4	8.2	-0.2
Accommodation, cafes and restaurants	2.5	2.2	-0.3
Transport and storage	5.3	4.7	-0.6
Communication services	2.8	2.1	-0.7
Finance and insurance	3.9	5.7	1.8
Property and business services	7.2	5.6	-1.6
Government administration and defence	4.7	5.2	0.5
Education	6.6	6.1	-0.5
Health and community services	7.2	7.1	-0.1
Cultural and recreational services	0.7	0.7	0.0
Personal and other services	1.9	1.8	-0.1
Ownership of dwellings	7.4	7.0	-0.4
Gross Value Added	100.0	100.0	

Growth in Real GVA

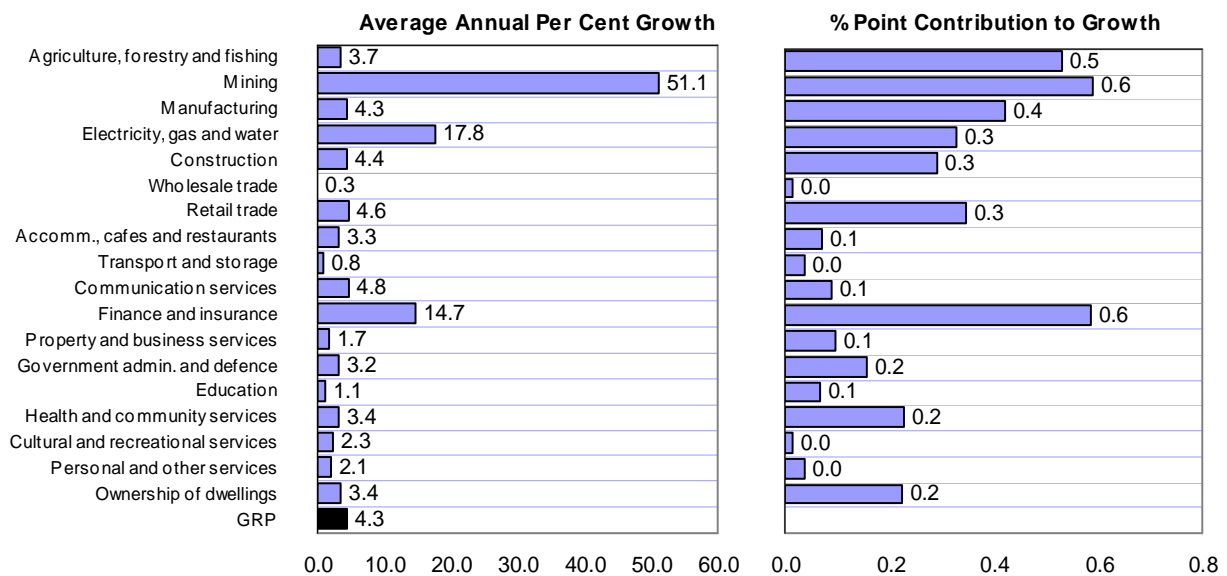
While the above discussion focuses on the current price industry composition of Darling Downs, Figure 8 presents average annual growth in real GVA by industry and each industry's contribution to regional growth.

Average annual growth in Darling Downs' GRP was 4.3 per cent between 2000-01 and 2005-06. Mining was the fastest growing industry in the region at 51.1 per cent. Although this industry is still the sixth smallest in Darling Downs, it has seen a considerable increase in the number of active projects, including coal mine expansions and increases in the extraction of coal seam methane gas in the region south of Dalby and extending west to Roma. Electricity, gas and water, and finance and insurance also showed strong growth at 17.8 per cent and 14.7 per cent respectively.

Finance and insurance, and mining were the largest contributors to GRP growth, each adding 0.6 percentage point followed by agriculture, forestry and fishing which contributed 0.5 percentage point to growth. Manufacturing added 0.4 percentage points to growth while electricity, gas and water, construction, and retail trade each recorded 0.3 percentage point contributions to growth.

Figure 8: Growth in Real GVA, 2000-01 to 2005-06, Darling Downs

Chain volume measures (\$, 2005-06)



4.2.4 South West

In real terms, South West recorded a 2.4 per cent decline in average annual economic activity to 2005-06, one of three Queensland regions to contract over the five years.

Industry Composition

Table 9 shows the industry composition of the South West economy based on current price estimates of GVA. The regional economy is dominated by agriculture, forestry and fishing (32.5 per cent) and mining (25.4 per cent). Both of these industries' share of the regions nominal GVA increased considerably with the share of agriculture, forestry and fishing increasing 2.5 percentage points while the mining industry's share was up 6.6 percentage points.

Construction and retail trade make up 4.8 per cent and 4.7 per cent respectively of South West nominal GVA. The construction industry's share of GVA decreased 1.6 percentage points in the five years to 2005-06, the largest decline in share of South West nominal GVA.

Table 9: Composition of Gross Value Added, South West

Current prices

South West	Composition		Change in Composition Percentage points
	2000-01	2005-06	
	Per cent	Per cent	
Agriculture, forestry and fishing	30.0	32.5	2.5
Mining	18.8	25.4	6.6
Manufacturing	2.0	1.5	-0.5
Electricity, gas and water	1.2	1.2	0.0
Construction	6.4	4.8	-1.6
Wholesale trade	3.9	2.4	-1.5
Retail trade	4.7	4.7	0.0
Accommodation, cafes and restaurants	2.4	2.1	-0.3
Transport and storage	5.0	3.7	-1.3
Communication services	2.7	1.4	-1.3
Finance and insurance	2.8	1.7	-1.1
Property and business services	3.2	2.0	-1.2
Government administration and defence	3.8	3.8	0.0
Education	3.2	3.2	0.0
Health and community services	4.0	4.5	0.5
Cultural and recreational services	0.4	0.3	-0.1
Personal and other services	1.6	1.4	-0.2
Ownership of dwellings	3.9	3.5	-0.4
Gross Value Added	100.0	100.0	

Growth in Real GVA

While the above discussion focuses on the current price industry composition of South West, Figure 9 presents average annual growth in real GVA by industry and each industry's contribution to regional growth.

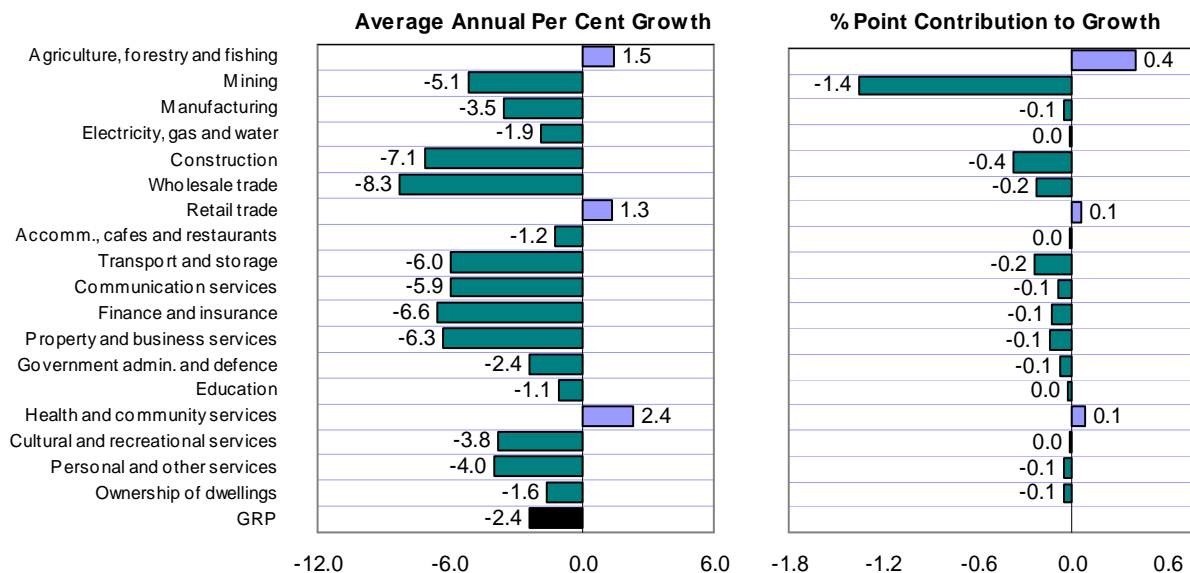
The South West experienced an average annual decline of 2.4 per cent in real GRP between 2000-01 and 2005-06. A 5.1 per cent fall in mining (which made up one quarter of nominal GVA in 2005-06) was the main driver of the decrease in GRP, detracting 1.4 percentage points from growth over the five years to 2005-06. This related to a decline in gas production over the period.

Construction detracted 0.4 percentage point from growth following an average annual decline in the industry of 7.1 per cent. This trend is reflected in Table 3 (Section 3.3) which shows the population of South West has declined by 0.3 per cent in the same five year period, weakening demand across the services sector.

Figure 9 also illustrates that agriculture, forestry and fishing recorded the highest contribution to growth, adding 0.4 percentage point while the only other industries to contribute to growth were retail trade and health and community services, each adding 0.1 percentage point to regional growth.

Figure 9: Growth in Real GVA, 2000-01 to 2005-06, South West

Chain volume measures (\$, 2005-06)



4.2.5 Fitzroy

Over the five years to 2005-06, Fitzroy grew by an average annual rate of 3.2 per cent in real terms.

Industry Composition

Table 10 shows the industry composition of Fitzroy's economy based on current price estimates of GVA. Mining is the prominent industry in Fitzroy at 39.3 per cent of nominal GVA in 2005-06, up 18.0 percentage points from 2000-01. Manufacturing, at 10.2 per cent and construction, at 6.8 per cent were the next largest contributors to Fitzroy's economy.

The largest changes in composition after mining were observed in agriculture, forestry and fishing (down 3.8 percentage points) and electricity, gas and water (down 3.7 percentage points) from 2000-01. Construction recorded a strong rise in its share of nominal GVA, up 1.5 percentage points on 2000-01. The decline in electricity, gas and water came after increases in coal prices and a decrease in the pool price of electricity over the period.

Table 10: Composition of Gross Value Added, Fitzroy

Current prices

Fitzroy	Composition		Change in Composition Percentage points
	2000-01	2005-06	
	Per cent	Per cent	
Agriculture, forestry and fishing	7.4	3.6	-3.8
Mining	21.3	39.3	18.0
Manufacturing	13.0	10.2	-2.8
Electricity, gas and water	9.6	5.9	-3.7
Construction	5.3	6.8	1.5
Wholesale trade	4.1	2.7	-1.4
Retail trade	5.4	4.2	-1.2
Accommodation, cafes and restaurants	2.3	1.7	-0.6
Transport and storage	5.6	4.8	-0.8
Communication services	1.5	0.9	-0.6
Finance and insurance	2.2	2.0	-0.2
Property and business services	5.1	4.3	-0.8
Government administration and defence	2.2	1.9	-0.3
Education	4.2	3.2	-1.0
Health and community services	3.9	3.1	-0.8
Cultural and recreational services	0.5	0.4	-0.1
Personal and other services	1.6	1.2	-0.4
Ownership of dwellings	5.0	3.9	-1.1
Gross Value Added	100.0	100.0	

Growth in Real GVA

While the above discussion focuses on the current price industry composition of Fitzroy, Figure 10 presents average annual growth in real GVA by industry and each industry's contribution to regional growth.

Fitzroy recorded average annual growth in real GRP of 3.2 per cent between 2000-01 and 2005-06. With the exception of the agriculture, forestry and fishing, and electricity, gas and water industries, both of which detracted 0.3 percentage point from growth, all other industries in Fitzroy recorded contributions to regional growth.

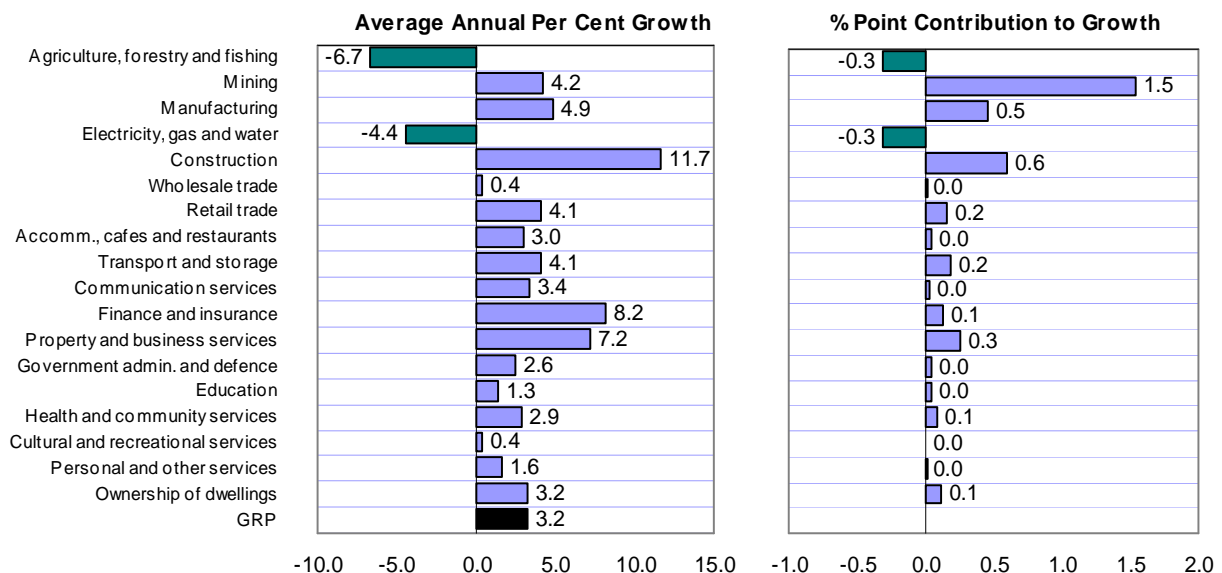
The fastest growth over the period was evident in the construction industry with 11.7 per cent and contributing 0.6 percentage point to growth in the region. Finance and insurance (at 8.2 per cent) and property and business services (at 7.2 per cent) also experienced high average annual growth.

Fitzroy recorded 4.2 per cent growth in mining (an industry which had a 39.3 per cent share of total nominal GVA in 2005-06) resulting in a strong contribution of 1.5 percentage points to growth. Manufacturing contributed 0.5 percentage point as a result of 4.9 per cent growth in the second largest industry in Fitzroy

Agriculture, forestry and fishing contracted with an average annual decline of 6.7 per cent over the period. Adverse conditions as a result of the drought contributed to this decline in production.

Figure 10: Growth in Real GVA, 2000-01 to 2005-06, Fitzroy

Chain volume measures (\$, 2005-06)



4.2.6 Central West

Central West experienced an average annual decline of 6.4 per cent in real GRP between 2000-01 and 2005-06. This was the largest decline in GRP of all Queensland regions.

Industry Composition

Table 11 shows the industry composition of the Central West economy based on current price estimates of GVA. The composition of nominal GVA is dominated by agriculture, forestry and fishing which accounts for 41.4 per cent of nominal GVA, up 5.7 percentage points since 2000-01.

The second largest industry in the region in 2005-06 was government administration and defence. The share of Central West nominal GVA for this industry was 8.4 per cent in 2005-06, up 2.8 percentage points on the previous period.

Table 11: Composition of Gross Value Added, Central West

Current prices

Central West	Composition		Change in Composition Percentage points
	2000-01	2005-06	
	Per cent	Per cent	
Agriculture, forestry and fishing	35.7	41.4	5.7
Mining	2.8	3.3	0.5
Manufacturing	0.8	0.4	-0.4
Electricity, gas and water	1.6	2.6	1.0
Construction	8.8	5.0	-3.8
Wholesale trade	3.4	2.1	-1.3
Retail trade	6.0	4.8	-1.2
Accommodation, cafes and restaurants	3.4	3.2	-0.2
Transport and storage	5.0	4.6	-0.4
Communication services	2.4	1.9	-0.5
Finance and insurance	2.2	1.9	-0.3
Property and business services	4.9	2.7	-2.2
Government administration and defence	5.6	8.4	2.8
Education	5.0	4.8	-0.2
Health and community services	4.9	5.9	1.0
Cultural and recreational services	0.8	1.0	0.2
Personal and other services	1.9	1.9	0.0
Ownership of dwellings	4.6	4.1	-0.5
Gross Value Added	100.0	100.0	

Growth in Real GVA

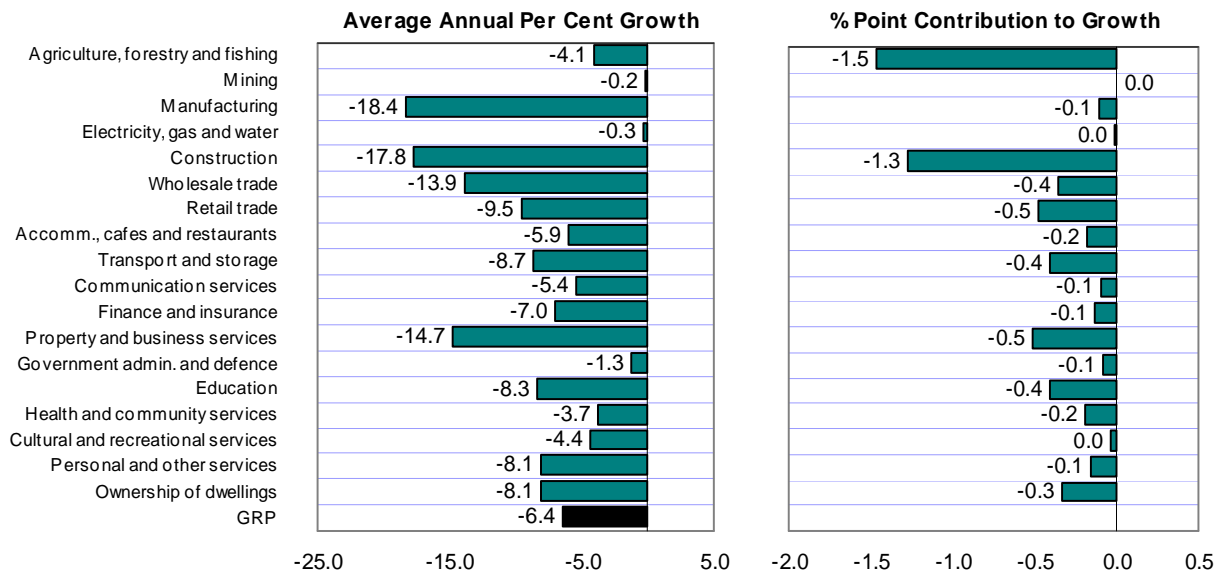
While the above discussion focuses on the current price industry composition of Central West, Figure 11 presents average annual growth in real GVA by industry and each industry's contribution to regional growth.

The Central West experienced an average annual decline of 6.4 per cent in real GRP in the five years to 2005-06. Each of the 18 industries contracted over the period with the agriculture, forestry and fishing (the largest industry in the region) detracting 1.5 percentage points from growth in Central West. The industry's 4.1 per cent decline in average annual terms follows a prolonged period of drought in regional Queensland which has restricted growth over the five years.

Construction recorded a substantial decline in Central West, down 17.8 per cent, detracting 1.3 percentage points from regional growth. The decrease across many industries corresponds with population counts for Central West which declined by an average annual 1.4 per cent over the five years to 2005-06 (see Table 3 above).

Figure 11: Growth in Real GVA, 2000-01 to 2005-06, Central West

Chain volume measures (\$, 2005-06)



4.2.7 Mackay

In real terms, Mackay recorded average annual growth of 5.5 per cent over the five years to 2005-06, second only to Moreton at 7.2 per cent and slightly ahead of Brisbane's growth over the same period of 5.4 per cent.

Industry Composition

Table 12 highlights the industry composition of Mackay's economy based on current price estimates of GVA. More than a half of Mackay's nominal GVA is generated by mining, an increase of 21.2 percentage points from 34.6 per cent in 2000-01. This is the largest increase in share of nominal GVA across all industries in Queensland. Construction also increased its share of nominal GVA by 0.7 percentage point to 5.8 per cent in 2005-06. Manufacturing is also important in the region, accounting for 4.8 per cent of nominal GVA in 2005-06.

Table 12: Composition of Gross Value Added, Mackay

Current prices

Mackay	Composition		Change in Composition Percentage points
	2000-01	2005-06	
	Per cent	Per cent	
Agriculture, forestry and fishing	5.4	3.6	-1.8
Mining	34.6	55.8	21.2
Manufacturing	7.7	4.8	-2.9
Electricity, gas and water	1.4	0.8	-0.6
Construction	5.1	5.8	0.7
Wholesale trade	5.0	3.3	-1.7
Retail trade	5.7	3.6	-2.1
Accommodation, cafes and restaurants	3.6	2.3	-1.3
Transport and storage	6.1	4.0	-2.1
Communication services	1.5	0.7	-0.8
Finance and insurance	2.3	1.6	-0.7
Property and business services	5.3	3.9	-1.4
Government administration and defence	1.8	1.1	-0.7
Education	3.3	1.8	-1.5
Health and community services	3.5	2.1	-1.4
Cultural and recreational services	0.5	0.3	-0.2
Personal and other services	1.3	0.8	-0.5
Ownership of Dwellings	5.8	3.9	-1.9
Gross Value Added	100.0	100.0	

Growth in Real GVA

While the above discussion focuses on the current price industry composition of Mackay, Figure 12 presents average annual growth in real GVA by industry and each industry's contribution to regional growth.

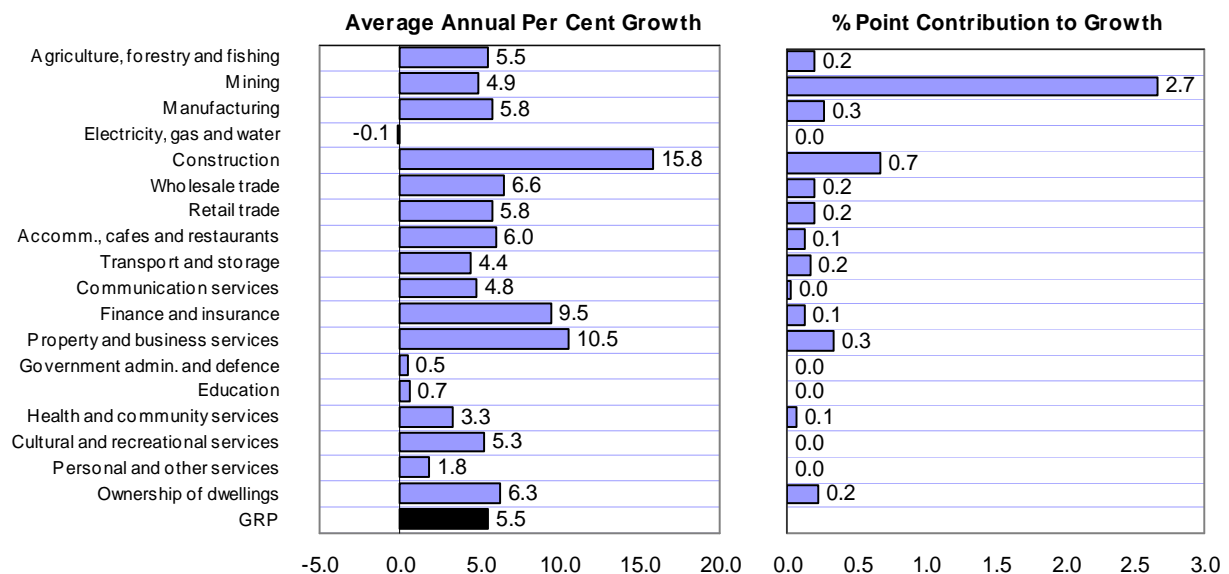
Average annual growth in Mackay's real GRP was 5.5 per cent between 2000-01 and 2005-06. High average annual growth was seen in construction (15.8 per cent), property and business services (10.5 per cent) and finance and insurance (9.5 per cent).

Despite mining recording relatively lower growth of 4.9 per cent, it was by far the strongest driver of activity, contributing 2.7 percentage points towards Mackay's growth. While the income received for coal has risen sharply, the underlying volume of production (measured here in CVM terms) has grown to a lesser extent.

The next highest contributor to Mackay's growth was construction at 0.7 percentage point. Manufacturing and property and business services each added 0.3 percentage points to regional growth.

Figure 12: Growth in Real GVA, 2000-01 to 2005-06, Mackay

Chain volume measures (\$, 2005-06)



4.2.8 Northern

The Northern SD experienced real average annual GRP growth of 2.6 per cent over the five years to 2005-06, 2.2 percentage points below the State average.

Industry Composition

Table 13 shows the industry composition of the Northern economy based on current price estimates of GVA. The largest industry in terms of its nominal GVA share is government administration and defence with 10.0 per cent (down 0.5 percentage point on 2000-01). The Northern region is the hub for Commonwealth and State Government administration and defence personnel for North Queensland.

The construction industry with a 9.9 per cent share of nominal GVA (up 3.0 percentage points from 2000-01) was the next largest industry in the Northern SD, followed by manufacturing at 9.0 per cent (down 0.5 percentage point) and property and business services at 8.0 per cent (up 0.3 percentage point).

Table 13: Composition of Gross Value Added, Northern

Current prices

Northern	Composition		Change in Composition Percentage points
	2000-01	2005-06	
	Per cent	Per cent	
Agriculture, forestry and fishing	6.8	6.6	-0.2
Mining	4.1	3.5	-0.6
Manufacturing	9.5	9.0	-0.5
Electricity, gas and water	1.4	2.2	0.8
Construction	6.9	9.9	3.0
Wholesale trade	4.7	3.9	-0.8
Retail trade	8.2	7.6	-0.6
Accommodation, cafes and restaurants	3.0	2.6	-0.4
Transport and storage	6.1	6.0	-0.1
Communication services	3.0	2.4	-0.6
Finance and insurance	3.2	3.7	0.5
Property and business services	7.7	8.0	0.3
Government administration and defence	10.5	10.0	-0.5
Education	5.8	5.7	-0.1
Health and community services	6.9	7.3	0.4
Cultural and recreational services	1.2	1.1	-0.1
Personal and other services	2.6	2.5	-0.1
Ownership of dwellings	8.3	7.9	-0.4
Gross Value Added	100.0	100.0	

Growth in Real GVA

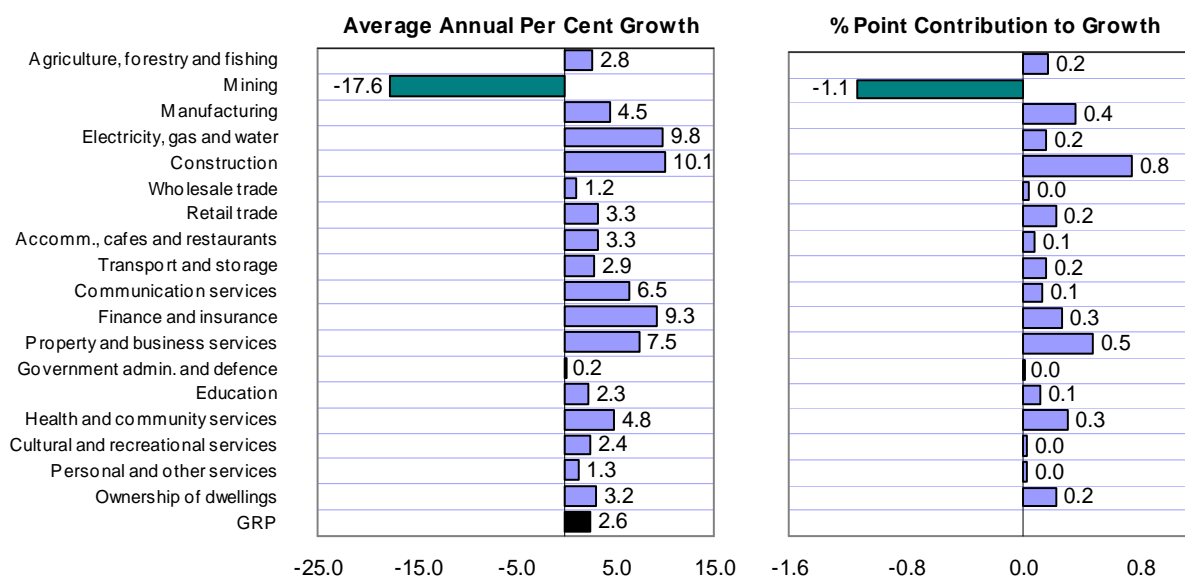
While the above discussion focuses on the current price industry composition of Northern, Figure 13 presents average annual growth in real GVA by industry and each industry's contribution to regional growth.

Average annual growth in Northern's GRP was 2.6 per cent between 2000-01 and 2005-06. As highlighted, all industries experienced growth with the exception of mining (down 17.6 per cent in average annual terms). Construction recorded the highest average annual growth in real GVA at 10.1 per cent followed by electricity, gas and water with 9.8 per cent. The decline in mining real GVA relates largely to a fall in gold production over the period as deposits were exhausted.

The highest contributor towards growth in the Northern SD was the construction industry with 0.8 percentage point followed by property and business services, and manufacturing which contributed 0.5 and 0.4 percentage point respectively.

While government administration and defence is the largest industry in the region, growth has been moderate recording average annual growth in real GVA of 0.2 per cent. This has resulted in a neutral impact on GRP growth over the period.

Figure 13: Growth in Real GVA, 2000-01 to 2005-06, Northern
Chain volume measures (\$, 2005-06)



4.2.9 Far North

In real terms, Far North recorded average annual growth in GRP of 2.4 per cent between 2000-01 and 2005-06.

Industry Composition

Table 14 shows the industry composition of the Far North economy based on current price estimates of GVA. The composition of nominal GVA is more evenly spread among the 18 industries than is the case in other regions of Queensland. Transport and storage is the largest industry accounting for 8.9 per cent of nominal GVA (up 0.2 percentage point) while retail trade and construction make up 8.7 per cent and 8.5 per cent respectively.

Property and business services, and agriculture, forestry and fishing were also prominent industries in Far North in 2005-06, accounting for 8.3 per cent and 7.8 per cent of nominal GVA respectively. Construction recorded the highest change in share with an increase of 2.0 percentage points from 2000-01, while accommodation, cafes and restaurants recorded the largest decline at 1.3 percentage points.

Table 14: Composition of Gross Value Added, Far North

Current prices

Far North	Composition		Change in Composition Percentage points
	2000-01 Per cent	2005-06 Per cent	
Agriculture, forestry and fishing	8.6	7.8	-0.8
Mining	4.1	3.5	-0.6
Manufacturing	5.9	5.2	-0.7
Electricity, gas and water	1.3	1.7	0.4
Construction	6.5	8.5	2.0
Wholesale trade	4.8	3.8	-1.0
Retail trade	9.2	8.7	-0.5
Accommodation, cafes and restaurants	7.2	5.9	-1.3
Transport and storage	8.7	8.9	0.2
Communication services	2.3	1.9	-0.4
Finance and insurance	3.0	3.5	0.5
Property and business services	8.0	8.3	0.3
Government administration and defence	6.2	7.3	1.1
Education	5.0	5.1	0.1
Health and community services	5.9	6.9	1.0
Cultural and recreational services	1.4	1.4	0.0
Personal and other services	2.5	2.8	0.3
Ownership of dwellings	9.3	8.9	-0.4
Gross Value Added	100.0	100.0	

Growth in Real GVA

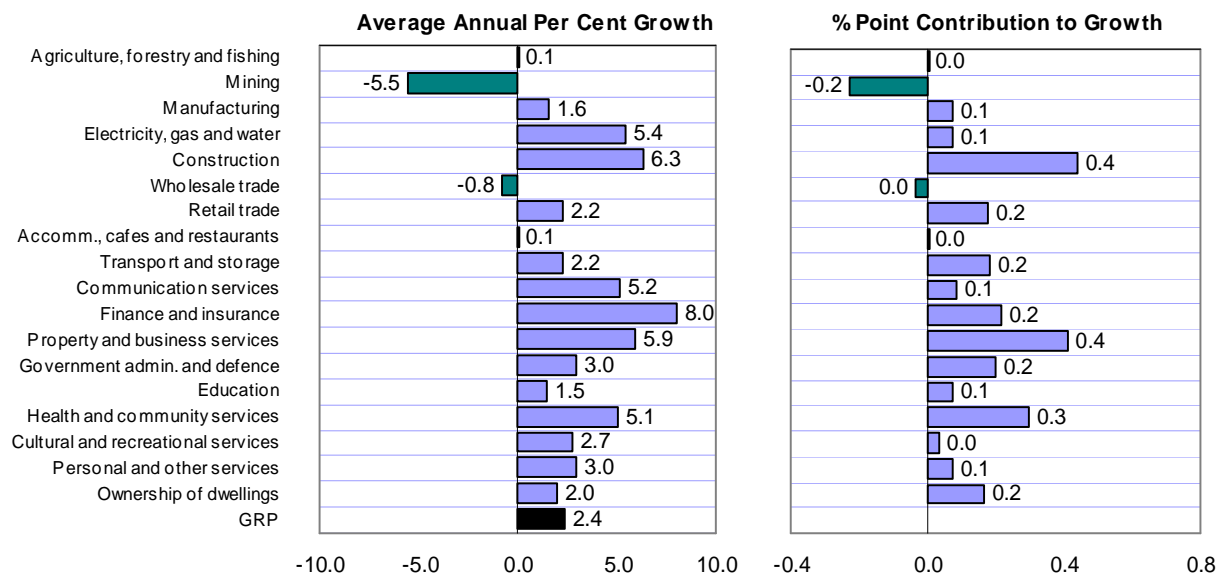
While the above discussion focuses on the current price industry composition of Far North, Figure 14 presents average annual growth in real GVA by industry and each industry's contribution to regional growth.

Average annual growth in Far North's real GRP was 2.4 per cent in the five years to 2005-06. The fastest growing industries in the region were finance and insurance (8.0 per cent), construction (6.3 per cent) and property and business services (5.9 per cent). The mining industry recorded the largest decline, down by 5.5 per cent, while wholesale trade was the only other industry to contract in the region, down 0.8 per cent. Similar to the Northern SD, the decline in mining real GVA related to a fall in gold production over the period.

The main contributors to growth in Far North were the construction and property and business services industries, each of which added 0.4 percentage point to growth. While mining detracted 0.2 percentage point, all other industries had a neutral or marginal impact on real GRP growth in the region.

Figure 14: Growth in Real GVA, 2000-01 to 2005-06, Far North

Chain volume measures (\$, 2005-06)



4.2.10 North West

The North West economy contracted at an average annual rate of 0.1 per cent over the five years to 2005-06. This was largely a result of declining agriculture, forestry and fishing and manufacturing industries.

Industry Composition

Table 15 illustrates the industry composition of the North West economy based on current price estimates of GVA. Mining accounted for more than two thirds of nominal GVA in the North West in 2005-06, up 18.4 percentage points from 2000-01, the only industry to increase its share over the period. This represents the largest change in composition by any industry in the North West region. Agriculture, forestry and fishing (at 4.3 per cent) and manufacturing (at 3.6 per cent) were the next largest industries in the North West region. Together, these three industries make up over 80 per cent of North West's nominal GVA.

Table 15: Composition of Gross Value Added, North West

Current prices

North West	Composition		Change in Composition Percentage points
	2000-01 Per cent	2005-06 Per cent	
Agriculture, forestry and fishing	7.4	4.3	-3.1
Mining	54.0	72.4	18.4
Manufacturing	7.7	3.6	-4.1
Electricity, gas and water	1.6	1.5	-0.1
Construction	4.2	2.5	-1.7
Wholesale trade	2.3	1.5	-0.8
Retail trade	2.9	1.7	-1.2
Accommodation, cafes and restaurants	1.6	1.0	-0.6
Transport and storage	3.0	2.2	-0.8
Communication services	0.8	0.4	-0.4
Finance and insurance	0.9	0.6	-0.3
Property and business services	2.9	1.5	-1.4
Government administration and defence	2.4	1.4	-1.0
Education	1.8	1.4	-0.4
Health and community services	2.1	1.7	-0.4
Cultural and recreational services	0.2	0.1	-0.1
Personal and other services	1.0	0.7	-0.3
Ownership of dwellings	2.9	1.7	-1.2
Gross Value Added	100.0	100.0	

Growth in Real GVA

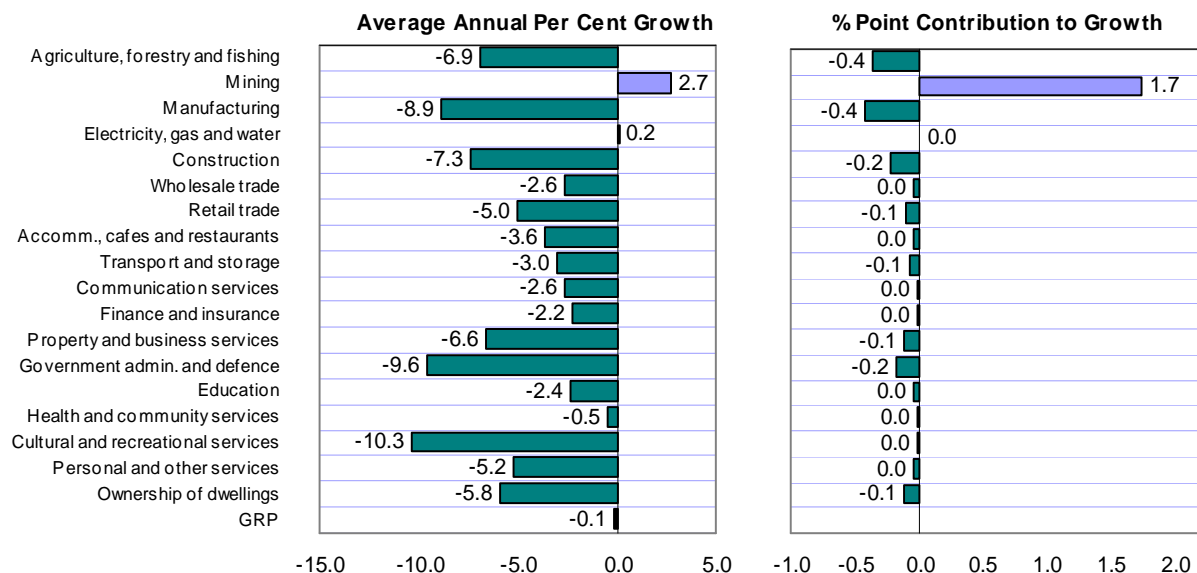
While the above discussion focuses on the current price industry composition of North West, Figure 15 presents average annual growth in real GVA by industry and each industry's contribution to regional growth.

The North West region experienced 0.1 per cent decline in real GRP over the five years to 2005-06. The decline of 0.1 per cent in GRP is largely due to the manufacturing and agriculture, forestry and fishing industries which declined at an average annual rate of 8.9 and 6.9 per cent respectively. Together, these industries detracted 0.8 percentage point from growth.

Mining, with 2.7 per cent average annual growth, and electricity, gas and water, with 0.2 per cent average annual growth, were the only two industries to experience growth between 2000-01 and 2005-06. While the mining industry was the driving force in the regional economy over the period, adding 1.7 percentage points to growth, electricity, gas and water had a neutral impact. All other industries had either no impact or detracted from growth in North West.

The region also was one of three Queensland SDs in which population fell, declining 1.5 per cent in average annual terms between 2000-01 and 2005-06. However, North West GRP experienced a more moderate contraction due to the fly-in-fly-out population whereby a proportion of the labour force contributed to economic activity in the region while residing elsewhere.

Figure 15: Growth in Real GVA, 2000-01 to 2005-06, North West⁴
Chain volume measures (\$, 2005-06)



⁴ For the North West region, the boundary between mining and manufacturing activity is somewhat blurred and changes in these two industries should be treated with some caution.

5 Glossary of terms

Chain volume measure

Chain volume measures (or real) estimates of GRP are presented to provide time series of production aggregates which are free of the direct effects of price changes. Current price estimates of production appearing in this publication have two components: a price and a quantity. Because these two components change from one period to the next, estimates of current price growth in GRP reflect both changes in quantity and price. In order to estimate changes in the underlying 'volume' of GRP between two periods the price effect needs to be removed. This is achieved by measuring GRP in each period using the same unit prices (i.e. the prices from a reference year). Chain volume measures are therefore derived to estimate the 'real' movement in GRP over time.

Compensation of employees (COE)

The total remuneration, in cash or in kind, payable by an enterprise to an employee in return for work done by the employee during the accounting period. It is further classified into two sub-components: wages and salaries; and employers' social contributions. Compensation of employees is not payable in respect of unpaid work undertaken voluntarily, including the work done by members of a household within an unincorporated enterprise owned by the same household. Compensation of employees excludes any taxes payable by the employer on the wage and salary bill (e.g. payroll tax).

Current prices

Estimates are valued at the prices of the period to which the observation relates. For example, estimates for 2000-01 are valued using 2000-01 prices. This contrasts to chain volume measures where the prices used in valuation refer to the prices of the reference period. For example, estimates for 2000-01 are valued using 2005-06 prices.

Gross mixed income of unincorporated enterprises (GMI)

The surplus or deficit accruing from production by unincorporated enterprises. It includes elements of both compensation of employees (returns on labour inputs) and operating surplus (returns on capital inputs).

Gross operating surplus (GOS)

The operating surplus accruing to all enterprises, except unincorporated enterprises, from their operations in a region. It is the excess of gross output over the sum of intermediate consumption, compensation of employees, and taxes less subsidies on production and imports. It is calculated before deduction of consumption of fixed capital, dividends, interest, royalties and land rent, and direct taxes payable, but after deducting the inventory valuation adjustment. Gross operating surplus is also calculated for general government, and it equals general government's consumption of fixed capital.

Gross state product (GSP)

GSP is defined equivalently to gross domestic product (GDP) but refers to production within a state or territory rather than to the nation as a whole. Details regarding its calculation are contained in the Explanatory Notes in this publication.

Gross Value Added

The contribution of an industry to the overall production in an economy (the value of output minus the value of inputs used in production). It is also gross factor income plus taxes less subsidies on production.

Implicit price deflator

Obtained by dividing a current price value by its real counterpart (the chain volume measure). When calculated from the major national accounting aggregates, such as gross domestic product, implicit price deflators relate to a broader range of goods and services in the economy than that represented by any of the individual price indexes that are published by the ABS.

Subsidies on production

Consist of all subsidies, except subsidies on products, which resident enterprises may receive as a consequence of engaging in production. Subsidies on production include: subsidies related to the payroll or workforce numbers, including subsidies payable on the total wage or salary bill, on numbers employed, or on the employment of particular types of persons, e.g. persons with disabilities or persons who have been unemployed for a long period. The subsidies may also be intended to cover some or all of the costs of training schemes organised or financed by enterprises. Subsidies aimed at reducing pollution are also included. See also Subsidies on products.

Subsidies on products and imports

Subsidies payable per unit of a good or service. The subsidy may be a specific amount of money per unit of quantity of a good or service, or it may be calculated ad valorem as a specified percentage of the price per unit. A subsidy may also be calculated as the difference between a specified target price and the market price actually paid by a purchaser. A subsidy on a product usually becomes payable when the product is produced, sold or imported, but it may also become payable in other circumstances, such as when a product is exported, leased, transferred, delivered or used for own consumption or own capital formation.

Taxes less subsidies on production, products and imports

Defined as 'taxes on products' plus 'taxes on production' less 'subsidies on products' less 'subsidies on production'.

Taxes on production

Consist of all taxes that enterprises incur as a result of engaging in production, except taxes on products. Taxes on production include: taxes related to the payroll or workforce numbers excluding compulsory social security contributions paid by employers and any taxes paid by the employees themselves out of their wages or salaries; recurrent taxes on land, buildings or other structures; some business and professional licences where no service is provided by the Government in return; taxes on the use of fixed assets or other activities; stamp duties; taxes on pollution; and taxes on international transactions.

Taxes on products and imports

Taxes payable per unit of some good or service. The tax may be a specific amount of money per unit of quantity of a good or service (quantity being measured either in terms of discrete units or continuous physical variables such as volume, weight, strength, distance, time, etc.), or it may be calculated ad valorem as a specified percentage of the price per unit or value of the goods or services transacted. A tax on a product usually becomes payable when the product is produced, sold or imported, but it may also become payable in other circumstances, such as when a good is exported, leased, transferred, delivered, or used for own consumption or own capital formation.

Total factor income

That part of the cost of producing the gross domestic product which consists of gross payments to factors of production (labour and capital). It represents the value added by these factors in the process of production and is equivalent to gross domestic product less taxes plus subsidies on production, products and imports.

6 Methodology

Estimates of GRP are produced using the income approach which aggregates the income generated by employees, government and firms. By summing compensation of employees, gross operating surplus, and gross mixed income, total factor income is derived. Total factor income is then converted to GVA by adding on taxes less subsidies on production from the ABS State Accounts. The sum of GVA across all industries plus taxes less subsidies on products (from ABS State Accounts) equals GRP.

Estimates of GRP for each ANZSIC 1993 industry division, plus Ownership of dwellings and taxes less subsidies on products, are provided at division level. For some industries, the compilation of GRP and its indicators are done at sub-division level, group or class level and then aggregated to the division level. For further information about ANZSIC 1993, please refer to ABS publication Australian and New Zealand Standard Industrial Classification, 1993 (ANZSIC) (ABS 1292.0.15.001).

Industry division level estimates of COE and GOS/GMI were sourced from the ABS Australian National Accounts, State Accounts (ABS 5220.0), benchmarked to Queensland State Accounts total for COE and GOS/GMI. Industry estimates of COE and GOS/GMI were allocated across Queensland's 13 SDs (11 for 2000-01) using a number of techniques defined below.

Estimates of GRP are (where possible) based on data representing place of work of employees rather than place of usual residence. This gives a more accurate representation of the production activity within a region.

Chain Volume Measures

Implicit price deflators used to derive chain volume measures of GRP by industry are sourced from ABS Australian National Accounts: State Accounts (ABS 5220.0), with one exception. GRP estimates for mining were developed using quantity revaluation on the value of production, from the Department of Mines and Energy, by applying the ratio of current to CVM value of production to the value added estimates.

Compensation of employees

In all cases except agriculture, forestry and fishing, and Manufacturing, COE was allocated to regions by industry total employment weighted by the mean income of each region sourced from the ABS Census Working Population Profile.

Agriculture, forestry and fishing COE was allocated to regions using a combination of industry employment from the ABS Census Working Population Profile, and gross value of production from the Department of Primary Industries and Fisheries and ABS Agricultural Census.

Manufacturing COE was allocated using COE data from the ABS Manufacturing Industry, Australia (ABS 8221.0), which collates data from the ABS Manufacturing Survey.

Gross operating surplus and gross mixed income

Methods for allocating GOS/GMI vary widely across the 18 industries. Where no other data are available, industry employment from the ABS Census Working Population Profile was used to allocate GOS/GMI to regions.

Agriculture, forestry and fishing

GOS/GMI was allocated to regions using two methods. The agriculture and fishing components were allocated to regions using value of production sourced from the Department of Primary Industries and Fisheries and ABS AgStats. Services to agriculture and forestry were allocated to regions using industry employment.

Mining

GOS/GMI was allocated using the value of mineral production in each region. Value of mineral production for each region and mineral type was sourced from the Queensland Department of Mines and Energy.

Manufacturing

GOS/GMI was allocated to regions using manufacturing turnover data from the ABS Manufacturing Industry, Australia (ABS 8221.0), which is sourced from the ABS Manufacturing Survey.

Electricity, Gas and Water Supply

GOS/GMI was split to the ANZSIC 1993 group level using shares from the Input-Output Framework used by the Office of Economic and Statistical Research to produce the 2003-04 Tourism Satellite Account, and allocated to regions using a variety of methods. Electricity was split by profits, and allocated to regions by profits from generation and distribution, and energy delivered from transmission, sourced from relevant Annual Reports. Gas was allocated by consumption and transmission profits, sourced from the Queensland Department of Mines and Energy, and the Office of the Code Registrar. Water was allocated using utility charges from each region sourced from *Queensland Local Government Comparative Information 2004-05* published by the Queensland Department of Local Government, Planning, Sport and Recreation.

Construction

GOS/GMI was split to the ANZSIC 1993 subdivision and group level using profit data from the ABS Australian Industry (ABS 8155.0) and ABS Australian Industry: Summary of Industry Performance, Australia (ABS 8155.0.55.002). General construction gross operating surplus is further split by value of work done, sourced from ABS Construction Work Done, Australia (ABS 8755.0), then allocated to regions using a combination of building approvals sourced from ABS Building Approvals, Australia (ABS 8731.0), and industry employment. Construction trade services gross operating surplus is allocated to regions using industry employment.

Wholesale Trade

GOS/GMI was split to ANZSIC 1993 subdivision level using profit data from the ABS Australian Industry (ABS 8155.0) and ABS Australian Industry: Summary of Industry Performance, Australia (ABS 8155.0.55.002), and allocated to regions using industry employment.

Retail Trade

GOS/GMI was split to ANZSIC 1993 subdivision level using profit data from the ABS Australian Industry (ABS 8155.0) and ABS Australian Industry: Summary of Industry Performance, Australia (ABS 8155.0.55.002), and allocated to regions using industry employment.

Accommodation, Cafes and Restaurants

GOS/GMI was split to the ANZSIC 1993 group level using total income and allocated to regions using a variety of methods. Accommodation was allocated using combination of accommodation takings and number of national and international overnight visitors. Pubs, taverns and Bars was allocated using a combination of proportion of the population's earnings, number of national visitor day trips and national and international overnight trips. Cafes and Restaurants was allocated by the share of the population over 18 years. Clubs was allocated to regions using combination of population and number of clubs with gaming machines.

Data were sourced from ABS Accommodation Industry, Australia (ABS 8695.0), ABS Clubs, Pubs, Taverns and Bars, Australia (ABS 8687.0), Cafes and Restaurant Industry, Australia (ABS 8655.0), ABS Tourist Accommodation, Australia (ABS 8635.0), Bureau of Tourism Research National Visitor Survey and International Visitor Survey, ABS 2001 Census Collection, ABS 2006 Census Collection, and Queensland Office of Gaming Regulation.

Transport and Storage

GOS/GMI was allocated to regions using industry employment.

Communication Services

GOS/GMI was allocated to regions using a combination of employment and population sourced from the ABS Census Community Profile.

Finance and Insurance

GOS/GMI was split to the ANZSIC 1993 subdivision and group level using Queensland Input Output shares from ABS Australian National Accounts: Input Output Tables (ABS 5209.0.55.001) for 2001-02, then allocated to regions using industry employment.

Property and Business Services

GOS/GMI was split to ANZSIC 1993 subdivision level using profit data from the ABS Australian Industry (ABS 8155.0) and ABS Australian Industry: Summary of Industry Performance, Australia (ABS 8155.0.55.002), and allocated to regions using industry employment.

Government Administration and Defence

GOS/GMI was allocated to regions using industry employment weighted by depreciation shares from IBISWorld Australia.

Education

GOS/GMI was allocated to regions using industry employment from the ABS Census Working Population Profile.

Health and Community Services

GOS/GMI was split to ANZSIC 1993 subdivision level using industry employment, and then allocated to regions using industry employment and population from the ABS Census Community Profile.

Cultural and Recreational Services

GOS/GMI was allocated to regions using industry employment.

Personal and Other Services

GOS/GMI was split to ANZSIC 1993 subdivision level using profit data from the ABS Australian Industry (ABS 8155.0) and ABS Australian Industry: Summary of Industry Performance, Australia (ABS 8155.0.55.002), and allocated to regions using industry employment.

Ownership of Dwellings

GOS/GMI was allocated to regions using a share of total dwellings weighted by median rent from the ABS Census Collection.

Net taxes on production

Net taxes on production are allocated to industries from the *ABS State Accounts shares*. These are then allocated to regions using factor income shares.

Net taxes on products

Net taxes on products are allocated to regions using an equal weighting of population and income shares. As there is no adequate method to allocate net taxes on products on an industry basis the industry composition of regions is analysed using GVA rather than GRP.

