Department of Justice and Attorney-General

Workplace Health and Safety Queensland

Construction industry report

Information and Evaluation Unit, WHSQ

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Executive summary

Introduction

Data provided in this report relates to work-related workers' compensation claims under the workers' compensation scheme in Queensland.

In this report, two performance indicators can be used to measure WHSQ performance: number and incidence rate.

'Number' measures the change in the actual number of injuries and or fatalities sustained in a given period.

The 'incidence rate' measures the number of claims relative to the number of employees covered by workers' compensation. Injury rate incidence measures are generally reported as the number of injuries per 1,000 employees covered. Fatality rate incidence measures are generally reported as the number of fatalities per 100,000 employees covered.

The incidence rate is a better and more useful WHS performance indicator as it takes into account the change in the number of workers in the labour force.

Statistical summary

International comparison

- In many industrialised economies there has been a steady downward trend in the fatality rate and the rate of non-fatal injuries in the construction industry.
- In Queensland, however, the fatality rate and the non-fatal claim rate in the construction industry has increased steadily from 2004-05 to 2008-09.

All accepted claims

- Leading up to the Global Financial Crisis (GFC), the workers' compensation claim rate for all accepted claims in Queensland construction grew 18 per cent from 48.0 to 56.5 claims per 1,000 workers between 2000-01 and 2008-9.
- However, after the GFC, the claim rate dropped sharply in 2009-10 to 46.0 claims per 1,000 workers, some 4 per cent lower than the 2000-01 rate.
- Nevertheless, using the ABS ANZSIC 2006 classification, from 2000-01 to 2009-10, the claim rate increased sharply in:
  - non-residential building construction (50.3 to 93.2),
  - building structure services (21.4 to 50.9) and
  - other construction services (24.5 to 32.6).
- Further, sectors with particularly high claim rates in 2009-10 included:
  - non-residential building construction (93.2) and
  - heavy and civil engineering construction (66.5).
- The most common types of injury in the construction industry were for:
  - lacerations,
  - trauma to muscles and tendons,
  - soft tissue injuries,
  - contusions and
  - foreign bodies.
- The most common mechanisms of injury were muscular stress, contact with objects and falls.

Comparing serious claims (seven days or more off work) in Queensland with the rest of Australia

- The serious claim rate declined slightly at five per cent in Queensland from 2000-01 to 2008-09. In contrast, the claim rate in the rest of Australia declined by 36 per cent over the period.
- Using the ABS ANZSIC 1993 classification, the sectors with the highest claim rate in Queensland were:
  - other construction services (53.0) and
  - building structure services (38.6) and
  - site preparation services (38.1).
- The data shows that there is a similar pattern of injury in construction in Queensland and the rest of Australia. However, Queensland tends to have a higher proportion of less serious strains and sprains and a slightly lower proportion of more serious musculoskeletal-related disorders. However, this may be due to the short tail nature of the Queensland workers' compensation scheme.

Harm index

- The harm index measures the average value of workers' compensation claims by industry sectors and for Queensland as a whole. The harm index values range from $6 per worker for libraries to $5,707 per workers for sheet metal product manufacture.
- The harm index value for construction sectors are clustered around the state average of $420:
  - $610 site preparation services,
  - $537 non-building construction,
  - $471 building structure services,
  - $410 other construction services,
  - $334 building construction,
  - $290 building completion services and
  - $255 installation trade services.

Fatalities – sum of years 2005-06 to 2008-09

- The average fatality rate for SWA compensated claims in Queensland (5.2 per 100,000) was higher than the rest of Australia (4.7 per 100,000).
- Based on the ABS ANZSIC 1993 classification, non-building construction had the highest fatality claim rate in both Queensland (14.7 per 100,000) and the rest of Australia (13.6 per 100,000).
- Fatalities due to a fall from a height is considerably more prevalent in Queensland (1.6 per 100,000) than the rest of Australia (0.8 per 100,000).

Detailed analysis

Occupations – 2 digit level

- Tradespersons recorded the most number of claims (1,896 claims in 2008-09).
- However - aside from clerks - labourers (34.3) and intermediate and transport workers (24.9) had the highest claim rate plus the biggest negative claim rate gap between Queensland and the rest of Australia.

Occupations – 3 digit level

- In 2006-07, the claim rate in some Queensland occupations was much higher than the claim rate in the rest of Australia:
  - construction and plumbers assistants (88.0 versus 32.0),
  - concreters (51.8 versus 39.3),
  - structural steel construction workers (63.9 versus 44.2) and
  - bricklayers (69.2 versus 36.4).

Sectors with consistent poor performance

- The 'building structure services' sector was the only sector to record an above average:
  - growth in number of claims,
  - claim rate growth and
  - harm index measure.

Explaining the high claim rate in Queensland

Strong growth in employment Queensland construction

- Queensland construction experienced particularly strong growth in employment 2000-01 to 2008-09, compared to other states in Australia.
- Strong employment growth was outstripped by growth in claims to 2008-09.
- This strong demand for labour is reflected, in part, in the strong growth in full-time rather than part-time employment in Queensland compared to the rest of the country.
- However, post the GFC, employment and workers' compensation claims dropped sharply.
- It is possible that workers' compensation claim rate may ease further in the short term if construction employment in Queensland continues to decline.

Age profile

- From 2000-01 to 2009-10, there was an influx of younger and older workers into the construction industry. This change in the age profile is not likely to have affected the overall industry claim rate because the higher claim rate of younger workers is likely to have been offset by the lower claim rate for older workers.
- However, over the period the claim rate for younger workers to 34 years of age increased quite markedly. This finding highlights the need to target safety programs at younger workers in construction.

Occupational structure

- The growth in the claim rate in construction in Queensland in recent years may have been due to an influx of unskilled workers into the industry.
- Compared to the rest of the country in 2009-10, Queensland had a lower proportion of the construction workforce engaged as technical and tradespersons and a higher proportion engaged as general labourers.
- From 2000-01 to 2008-09, the proportion of workers engaged in technical and trades jobs in Queensland declined by 5 percentage points.
- In contrast, labourers' share of Queensland construction employment increased 4 percentage points.

Duration of employment

- The building boom in Queensland attracted new labour into the industry. As a result, there was a decline in the average experience level of workers in the Queensland construction industry.
- Over the period 2004 to 2010, the proportion of new entrants (with less than two years work experience) was consistently higher in Queensland construction than the rest of Australia from 2004 to 2010.
- Conversely, compared to the rest of Australia, Queensland had a lower proportion of workers with more than five years work experience for the period 2004 to 2010.

Educational qualifications

- Census 2006 data suggests that a slightly higher proportion of construction workers in Queensland have no post school qualification compared to the rest of Australia.
- Similarly, a slightly lower proportion of Queensland construction workers have diploma or superior qualification compared to the rest of Australia.

- Ensuring a suitably qualified and trained construction workforce is an important element in ensuring safety standards in Queensland construction workplaces.

Injury rates and the economic cycle

- A number of studies have shown that workers' compensation claims rates are associated with economic cycles.1 Claim rates tend to increase during the upswing due to:
  - the more intensive use of labour;
  - short cutting of safety procedures and training;
  - a higher proportion of less experienced new hires;
  - less worker fear of filing compensation claims;
  - overuse of machinery, without proper maintenance; and
  - the use of outdated or unsafe plant.

- Conversely, claim rates tend to drop during recessions as:
  - the less experienced workers are the first to be laid off;
  - the least safe plant is taken out of services;
  - the pace of work is slower; and
  - there is more time available for rest breaks, training and observance of safety rules.

CISR data

- From 2004-05 to 2009-10, the overwhelming majority of notices and verbal directions were issued in:
  - house construction,
  - non-residential building construction and
  - residential building construction n.e.c.
- Over the period 2004-05 to 2009-10, there was a decline in improvement notices (seven per cent) and no change in the number of verbal directions. Infringement notices increased two per cent and prohibition notices increased 31 per cent.
- Failure to provide effective fall protection measures was the most common reason for inspectors issuing infringement notices, prohibition notices and verbal directions.
- The most common categories for improvement notices issued were for workplace (electrical) installations, plant (guarding and maintenance), and construction plans and work method statements.
- Notices and verbal directions pertaining to MSDs were rare.
- In terms of activities from 2005-06 to 2009-10, there was a dramatic growth of advisories (170%) and a more moderate growth in event/investigations (23%) and assessment (31%).

[1] Asfaw A., Pana-Cryan R. and Rosa R. (2011) 'The Business Cycle and the Incidence of Workplace Injuries: Evidence from the U.S.A.', *Journal of Safety Research*, 42: 1-8.
Institute for Work and Health (2009) *Workers' Compensation and the Business Cycle – Issue Briefing*, Institute for Work and Health, March, Toronto.
WorkCover New South Wales (2009) *Impact of the Economic Cycle on WorkCover's Operations*, WorkCover New South Wales, Sydney.
Davies R. and Jones P. (2005) *Trends and Context to Rates of Workplace Injury*, prepared by Warwick Institute for Employment Research for the Health and Safety Executive.

Introduction

Throughout the world, construction is a hazardous industry. As demonstrated in Table 1, construction has a high fatality rate - along with mining and transport - in most countries.

Table 1

Fatality Rate in Various Countries, Select Industries, 2008

	Australia[# 1]	Canada[# 2]	France*[3]	Italy*[4]	Spain*[5]	Sweden[#]	U.S.A.[# 7]
Mining and Quarrying	5	14.1	0.09	10	28.7	25	18.1
Manufacturing	2.9	2.4	0.02	3	4.1	1.7	2.5
Construction	4.4	8.7	0.06	10	10	5.8	9.7
Wholesale and Retail Trade	0.6	1.6	0.01	2	1.5	0.7	-
Transport, Storage and Communications	11.1	7.9	0.05	9	11.8	3.7	-
Financial Intermediation	0.3	0.1	0.01	0	0.5	0	0.3
Public Administration and Defence	1.2	2.8	0.02	1	0.9	0.4	2.4
Education	0.4	0.4	0.01	-	0.2	0	0.9

Source: Laborsta, ILO, accessed 15 June 2011

Note: * per 100,000 workers insured. # per 100,000 workers employed

1. Financial year ending in year indicated; excluding Victoria and Australian Capital Territory.

2. Prior to 2000: including occupational diseases. 2000: Revised series. 2001: Revised series. 2002: Revised series. 2003: Revised series. 2004: Revised series. 2005: Revised series. 2006: Revised series. 2007: Revised series. 2008: Revised series.

3. Cases recognized for compensation during the year.

4. 2008: Revised data.

5. Deaths occurring within one month of accident. 2007: Revised data.

6. Year beginning in April of year indicated; prior to 1994: excluding Northern Ireland.

7. Total and category L also include government sector excluded from the other categories. 2008: Fatality rates for civilian workers only and based on the number of hours worked ; rates not strictly comparable.

Similarly, as shown in Table 2, construction also has a high rate of non-fatal injury – as is also the case in mining, manufacturing and transport - around the world.

Table 2

Rate of Non-fatal Injury in Various Countries, Select Industries, 2008

	Australia[# 1]	Canada[# 2]	France*[3]	Italy*[4]	Spain*[5]	Sweden[#]	U.S.A.[# 7]
Mining and Quarrying	1,550	987	27	1,834	16,750	1,590	1.3
Manufacturing	1,130	2,402	26	2,912	8,303	1,138	1.2
Construction	1,710	2,445	52	3,825	10,656	998	1.7
Wholesale and Retail Trade	780	1,539	23	1,899	4,545	354	-
Transport, Storage and Communications	1,500	2,050	38	3,698	7,009	989	-
Financial Intermediation	170	55	3	247	565	448	0.2
Public Administration and Defence	890	1,985	36	1,526	3,599	578	0.7
Education	480	602	10	946	1,227	468	1.4

Source: Laborsta, ILO, accessed 15 June 2011

Note: * per 100,000 workers insured. # per 100,000 workers employed. ** per 200,000 hours worked in private sector

1. Financial year ending in year indicated; excluding Victoria and Australian Capital Territory. 2004: Revised data. 2005: Revised data. 2006: Revised data. 2007: Revised data. 2008: Revised data.

2. Prior to 2000: including occupational diseases. 2000: Revised series. 2001: Revised series. 2002: Revised series. 2003: Revised series. 2004: Revised series. 2005: Revised series. 2006: Revised series. 2007: Revised series. 2008: Revised series.

3. Cases recognized for compensation during the year.

4. 2008: Revised data.

5. 2007: Revised data.

6. Year beginning in April of year indicated; prior to 1994: excluding Northern Ireland.

7. Private sector.

Nevertheless, in many industrialised economies there has been a steady downward trend in the fatality rate and the rate of non-fatal injuries in the construction industry. Table 3 shows that over the period 2000 to 2008, the fatality rate has declined in a range of countries, with the exception of France. Similarly, over the same period, the rate of non-fatal injury declined in all of the select countries shown in Table 4, including France.

Table 3

Fatality Rate in Construction, Various Countries, 2000 to 2008

	2000	2001	2002	2003	2004	2005	2006	2007	2008
Australia# [1]	7	8	5.9	5.5	5.1	3.8	4.5	4.7	4.4
Canada# [2]	10.4	11.8	11.2	10.4	10.1	10.9	9.6	8.2	8.7
France* [3]	-	-	-	-	-	7.8	10.2	12	-
Italy* [4]	20	18	15	17	14	14	15	11	10
Spain* [5]	22.9	19.7	17	16.4	13.5	14	12.1	11	10.6
Sweden#	9.1	5.1	5	4.2	2.5	4.4	4.1	5.6	5.8
United Kingdom# [6]	6.4	5.3	5.1	4.4	4.9	3.7	4.5	-	-
United States# [7]	-	-	-	11.7	12	11	11	11	9.7

Source: Laborsta, ILO, accessed 15 June 2011

Note: * per 100,000 workers insured. # per 100,000 workers employed

1. Financial year ending in year indicated; excluding Victoria and Australian Capital Territory.
2. Prior to 2000: including occupational diseases. 2000: Revised series. 2001: Revised series. 2002: Revised series. 2003: Revised series. 2004: Revised series. 2005: Revised series. 2006: Revised series. 2007: Revised series. 2008: Revised series.
3. Cases recognized for compensation during the year.
4. 2008: Revised data.
5. Deaths occurring within one month of accident. 2007: Revised data.
6. Year beginning in April of year indicated; prior to 1994: excluding Northern Ireland.
7. Total and category L also include government sector excluded from the other categories. 2008: Fatality rates for civilian workers only and based on the number of hours worked ; rates not strictly comparable.

Table 4

Rate of Non-fatal Injury in Construction, Various Countries, 2000 to 2008

	2000	2001	2002	2003	2004	2005	2006	2007	2008
Australia# [1]	2,640	2,620	2,390	2,250	2,190	2,040	1,790	1,680	1,710
Canada# [2]	3,394	3,277	3,129	2,967	2,937	2,820	2,748	2,639	2,445
France* [3]	-	-	-	-	-	9,115	8,829	8,752	-
Italy* [4]	6,504	5,828	5,610	5,337	5,263	4,983	4,656	4,246	3,825
Spain* [5]	18,747	18,287	17,275	15,267	13,866	13,471	12,886	12,575	10,824
Sweden#	1,490	1,499	1,518	1,408	1,259	1,212	1,208	1,126	998
United Kingdom# [6]	1,189	1,134	1,122	994	968	926	868	-	-
United States ** [7]	-	-	-	2.6	2.4	2.4	2.2	1.9	1.7

Source: Laborsta, ILO, accessed 15 June 2011

Note: * per 100,000 workers insured. # per 100,000 workers employed. ** per 200,000 hours worked in private sector

1. Financial year ending in year indicated; excluding Victoria and Australian Capital Territory. 2004: Revised data. 2005: Revised data. 2006: Revised data. 2007: Revised data. 2008: Revised data.
2. Prior to 2000: including occupational diseases. 2000: Revised series. 2001: Revised series. 2002: Revised series. 2003: Revised series. 2004: Revised series. 2005: Revised series. 2006: Revised series. 2007: Revised series. 2008: Revised series.
3. Cases recognized for compensation during the year.
4. 2008: Revised data.
5. 2007: Revised data.
6. Year beginning in April of year indicated; prior to 1994: excluding Northern Ireland.
7. Private sector.

In Queensland, however, the fatality rate and the non-fatal claim rate in the construction industry has increased steadily from 2004-05 to 2008-09 (see Table 5). The following report examines in detail the pattern of injury in the Queensland construction industry, by sub-sector and occupation. The report then compares the performance of Queensland construction to construction in the rest of Australia.

The report explores possible explanations as to the factors that may have contributed to the high claim rates in the Queensland construction industry. These potential explanatory factors include changes in the structure of employment, age, occupations and educational qualifications.

Table 5
Accepted Fatal and Non-fatal Workers' Compensation Claims, Construction, Queensland, 2004-05 to 2008-09 (rate)

	2004-05	2005-06	2006-07	2007-08	2008-09
Fatality Rate*	3.3	5	3.2	6	5.5
Non-fatal Claim Rate**	16.9	17.1	17.4	18.1	18.5

Source: Statistical Update, WHSQ Board May 2011
Note: * rate per 100,000 workers
** rate per 1,000 workers

Methodology

WHSQ Performance Measures
Two performance indicators can be used to measure WHSQ performance: number and incidence rate.

'Number' measures the change in the actual number of injuries and or fatalities sustained in a given period.

The 'incidence rate' measures the number of claims relative to the number of employees covered by workers' compensation. Injury rate incidence measures are generally reported as the number of injuries per 1,000 employees covered. Fatality rate incidence measures are generally reported as the number of fatalities per 100,000 employees covered.

The incidence rate is a better and more useful WHS performance indicator as it takes into account the change in the number of workers in the labour force.

Employment estimates
Four types of employment estimates are used to calculate the incidence rate measures in this report. These employment data are the most suitable source of information publicly available.

1. SWA employee numbers - generated especially for Safe Work Australia (SWA) by the Australian Bureau of Statistics (ABS) – estimate the number of employees covered by the workers compensation system in each jurisdiction and for Australia allowing direct comparison of injury rates by jurisdiction. These numbers are not directly comparable with employee estimates reported by the ABS in the Labour Force and other ABS publications.

2. ABS labour force data for the number of employees plus own account workers is used to calculate incidence rate measures based on workers' compensation claims in Queensland as reported in the Queensland Employer Injury Database (QEIDB).

3. Census employee data is used for calculating incidence rates at the four digit ABS Australia and New Zealand Standard Industry Classification (ANZSIC) level as this data is not available from SWA or from any other published ABS sources.

4. ABS data for all employed persons is used to calculate incidence rates by age because the ABS does not publish more detailed data at lower levels.

As a result, it is not possible to compare directly incidence rate measures between tables that use different employment data sources.

Australia and New Zealand Standard Classification of Industry (ANZSIC)
Where possible, ANZSIC 2006 is used rather than ANZSIC 1993. Attachments 1 and 2 provide a list of the various sub-sectors in the used in ANZSIC 1993 and ANZSIC 2006.

Construction claims 2000-01 to 2008-09

Workers compensation claims – QEIDB data

Table 6 contains data on the number of all accepted non-fatal claims in construction sectors in Queensland 2000-01 to 2009-10. As can be seen, claims increased strongly from 2000-01 to 2008-09 (116 per cent). In 2009-10, however, claims dropped markedly. As a result, over the period 2000-01 to 2009-10, claim increased at 69 per cent rather than 116 per cent.

At the three digit ANZSIC 2006 level, the growth rate was especially high in:

- non-residential building construction (185%),
- land development and site preparation services (108%),
- building structure services (204%) and
- other construction services (208%).

At the four digit ANZSIC 2006 level, the following sub-sectors exhibited a growth in claims double the industry average:

- non-residential building construction (185%),
- concreting services (193%),
- bricklaying services (151%),
- roofing services (183%),
- structural steel erections services (419%),
- plumbing services (129%),
- fire and security system services (143%),
- construction services n.e.c. (356%).

Note that all sub-sectors in ‘building structure service’ sector experienced double the growth in claims of the industry as a whole.

Table 6

Claims in Construction Sectors, Queensland, 2000-01 to 2008-09 (Number, Per Cent)

Subsector	*2000-01*	*2001-02*	*2002-03*	*2003-04*	*2004-05*	*2005-06*	*2006-07*	*2007-08*	*2008-09*	*2009-10*	*Change 2000-01-2008-9*	*Change 2000-01-2009-10*
Residential building construction	**534**	**301**	**394**	**595**	**727**	**743**	**861**	**1,066**	**1,026**	**774**	**92%**	**45%**
House construction	395	260	339	426	501	465	656	769	737	607	87%	54%
Other residential building construction	139	41	55	169	226	278	205	297	289	167	108%	20%
Non-residential building construction	**327**	**311**	**420**	**692**	**825**	**927**	**1,106**	**1,344**	**1,313**	**932**	**302%**	**185%**
Non-residential building construction	327	311	420	692	825	927	1,106	1,344	1,313	932	302%	185%
Heavy and civil engineering construction	**1,101**	**1,165**	**673**	**695**	**686**	**909**	**1,196**	**1,701**	**1,926**	**1,414**	**75%**	**28%**
Road and bridge construction	318	221	177	248	231	271	374	528	756	530	138%	67%
Other heavy and civil engineering construction	783	944	496	447	455	638	822	1,173	1,170	884	49%	13%
Land development and site preparation services	**347**	**326**	**371**	**420**	**440**	**482**	**676**	**730**	**792**	**721**	**128%**	**108%**
Land development and subdivision									65	86	-	-
Site preparation services	347	326	371	420	440	482	676	730	727	635	110%	83%
Building structure services	**268**	**297**	**385**	**480**	**465**	**490**	**864**	**1,017**	**981**	**815**	**266%**	**204%**
Concreting services	133	148	198	244	243	236	401	528	476	390	258%	193%
Bricklaying services	57	47	66	89	89	114	180	186	168	143	195%	151%
Roofing services	52	59	84	96	89	89	169	164	166	147	219%	183%
Structural steel erection services	26	43	37	51	44	51	114	139	171	135	558%	419%
Building installation services	**1,443**	**1,187**	**1,293**	**1,381**	**1,470**	**1,614**	**2,224**	**2,348**	**2,397**	**2,082**	**66%**	**44%**
Plumbing services	241	164	220	243	303	293	469	589	555	551	130%	129%
Electrical services	563	460	495	543	587	691	1,004	1,029	1,084	910	93%	62%
Air conditioning and heating services	572	496	524	531	498	535	603	538	538	453	-6%	-21%
Fire and security alarm installation services	67	67	54	64	82	95	148	192	198	164	196%	145%
Other building installation services									22	4	-	-
Building completion services	**882**	**758**	**835**	**996**	**971**	**1,085**	**1,288**	**1,495**	**1,517**	**1,174**	**72%**	**33%**
Plastering and ceiling services	125	106	114	136	160	162	227	250	288	234	130%	87%
Carpentry services	226	267	329	386	291	338	469	597	538	423	138%	87%
Titling and carpeting services	60	51	60	65	56	81	105	102	106	88	77%	47%
Painting and decorating services	132	119	116	131	150	177	235	223	232	182	76%	38%
Glazing service	339	215	216	278	314	327	252	323	353	247	4%	-27%
Other construction services	**257**	**256**	**400**	**422**	**623**	**669**	**900**	**1,153**	**1,168**	**791**	**354%**	**208%**
Landscape construction services	141	127	148	164	213	202	272	309	321	217	128%	54%
Hire of construction machinery with operator									66	45	-	-
Other construction service n.e.c.	116	129	252	258	410	467	628	844	781	529	573%	356%
Total	**5,159**	**4,601**	**4,771**	**5,681**	**6,207**	**6,919**	**9,115**	**10,854**	**11,120**	**8,703**	**116%**	**69%**

Source: QEIDB all accepted claims, as at June 2011 and subject to change over time. ABS Labour Force 6291.0.55.003. Data for construction ANZSIC2006 only.
Note: mesothelioma and asbestosis claims excluded.

Claim rate – Queensland Employer Injury Database (QEIDB)
The claim rates for ABS defined ANZSIC 2006 construction sectors are displayed in Table 7. Consistent with the pattern evident in the claims data, the claim rate increased till 2008-09 before declining 2009-10 after the GFC. The claim rate in 2009-10 was some four per cent lower than it was in 2000-01.

In 2009-10, the sector with the highest claim rate was non-residential building construction at 93.2 claims per 1,000 workers compared to 46.0 claims per 1,000 workers for construction as a whole in Queensland. Both non-residential building construction (85%) and building structure services (138%) recorded a large increase in the claim rate over the period 2000-01 to 2009-10.

Types of injury
Table 8 shows the pattern of the injury in construction from 2005-06 to 2009-10.[2] As shown, the most prevalent claims were for lacerations, trauma to muscles and tendons and soft tissue injuries. Injuries due to trauma to muscles, tendons, joints and ligaments more than doubled over the period.

As shown in Table 9, the most common mechanisms of injury in construction were muscular stress, contact with moving objects and falls. Claims for falls from a height and hitting moving objects increased almost doubled over the period.

The agencies of injury in Queensland construction are shown in Table 10. The most common agencies were metal and vehicles such as cars and utilities. From 2005-06 to 2009-10, there was a steep growth in the number of claims for other and not specified ladders and other and not specified timber.

[2] There was a break in the series as version 3 of TOOCS (Type of Occurrence Classification System) was adopted 2005.

Table 7

Claim Rate Construction Sectors, Queensland, 2000-01 to 2008-09 (Rate Per 1,000, Per Cent)

Sector	*2000-01*	*2001-02*	*2002-03*	*2003-04*	*2004-05*	*2005-06*	*2006-07*	*2007-08*	*2008-09*	*2009-10*	*Change 2000-01 to 2008-9*	*Change 2000-01 to 2009-10*
Residential building construction	47.5	24.6	30.9	48.6	59.3	45.7	40.5	46.9	60.4	37.3	27%	-21%
Non-residential building construction	50.3	44.4	56.0	98.9	117.9	97.6	116.4	131.1	154.5	93.2	207%	85%
Heavy and civil engineering construction	67.8	77.7	57.3	54.5	49.0	82.6	57.0	88.4	95.1	66.5	40%	-2%
Land development and site preparation services	55.5	56.7	47.9	48.0	45.1	56.7	58.8	52.1	68.9	48.1	24%	-13%
Building structure services	21.4	25.8	30.2	31.0	24.2	26.1	41.1	48.4	43.6	50.9	103%	138%
Building installation services	72.2	51.6	50.7	46.8	46.7	41.9	51.4	52.5	48.9	48.1	-32%	-33%
Building completion services	36.4	32.3	33.4	31.6	22.7	28.2	32.4	35.4	33.7	30.3	-7%	-17%
Other construction services	24.5	29.3	30.2	25.6	40.9	37.2	48.6	67.8	50.8	32.6	107%	33%
Total	48.0	43.1	41.0	42.5	40.9	43.5	49.1	56.8	56.5	46.0	18%	-4%

Source: QEIDB all accepted claims, as at June 2011 and subject to change over time. ABS Labour Force 6291.0.55.003. Data for construction ANZSIC2006 only.
Note: mesothelioma and asbestosis claims excluded. Employment data excludes non-defined industry sectors 300, 320 and E00.

Table 8

Most Comon Types of Injuries, Construction, Queensland, 2005-06 to 2008-09 (Number, Per Cent)

Injury Description	*2005-06*	*2006-07*	*2007-08*	*2008-09*	*2009-10*	*Change*
Laceration or open wound not involving traumatic amputation	1,452	2,036	2,403	2,525	1,986	37%
Trauma to muscles and tendons, unspecified	669	1,361	1,361	1,314	1,031	54%
Soft tissue injuries due to trauma or unknown mechanisms with insufficient information to code elsewhere	534	834	1,169	1,215	631	18%
Contusion, bruising and superficial crushing	502	522	635	688	565	13%
Foreign body on external eye, in ear or nose or in respiratory, digestive or reproductive tract	406	582	669	666	507	25%
Other fractures, not elsewhere classified	473	593	653	616	473	0%
Trauma to joints and ligaments, unspecified	246	442	723	813	646	163%
Trauma to joints and ligaments, not elsewhere classified	231	473	658	616	586	154%
Trauma to muscles	386	323	419	419	346	-10%
Hernias	128	162	173	164	159	24%
Trauma to muscles and tendons, not elsewhere classified	141	130	144	144	179	27%
Total	6,919	9,115	10,854	11,120	8,703	26%

Source: QEIDB all accepted claims, as at June 2011 and subject to change over time. ABS Labour Force 6291.0.55.003. Data for construction ANZSIC2006 only.
Note: mesothelioma and asbestosis claims excluded.

Table 9

Most Common Mechanisms of Injury, Construction, Queensland, 2000-01 to 2008-09

Mechanism	*2005-06*	*2006-07*	*2007-08*	*2008-09*	*2009-10*	*Change*
Muscular stress while lifting, carrying, or putting down objects	979	1,210	1,470	1,484	1,203	23%
Hitting moving objects	705	1,082	1,519	1,724	1,267	80%
Muscular stress while handling objects other than lifting, carrying or putting down	735	971	1,190	1,160	977	33%
Being hit by moving objects	811	1,130	1,110	1,104	919	13%
Falls on the same level	771	893	1,031	1,104	765	-1%
Falls from a height	463	815	995	1,043	843	82%
Hitting stationary objects	583	706	715	607	553	-5%
Being hit by falling objects	350	448	621	620	330	-6%
Vehicle accident	299	332	417	452	307	3%
Being trapped between stationary and moving objects	223	310	425	419	262	17%
Muscular stress with no objects being handled	199	240	382	369	350	76%
Unspecified mechanisms of incident	232	297	234	205	162	-30%
Total	6,919	9,115	10,854	11,120	8,703	26%

Source: QEIDB all accepted claims, as at June 2011 and subject to change over time. ABS Labour Force 6291.0.55.003. Data for construction ANZSIC2006 only.
Note: mesothelioma and asbestosis claims excluded.

Table 10

Most Common Agencies of Injury, Construction, Queensland, 2005-06 to 2008-09

Agency Description	2005-06	2006-07	2007-08	2008-09	2009-10	Change
Agency not apparent	821	890	952	936	900	10%
Other and not specified ferrous and non-ferrous metal	314	513	673	631	484	54%
Other and not specified cars, station wagons, vans, utilities	235	279	380	439	292	24%
Other and not specified materials and objects	113	228	361	315	253	124%
Metal fragments	165	256	300	295	241	46%
Other and not specified traffic and ground surfaces	140	224	269	293	211	51%
Other and not specified trucks, semi-trailers, lorries	132	166	212	242	190	44%
Traffic and ground surfaces with hazardous objects	137	177	217	219	154	12%
Electric drills	133	165	160	237	162	22%
Other and not specified ladders	38	152	270	269	153	303%
Bars, rods, ingots, beams	123	167	187	179	163	33%
Hammers, mallets	124	144	188	194	147	19%
Other and not specified timber	52	36	140	286	220	323%
Other and not specified fragments	84	166	181	186	162	93%
Total	6,919	9,115	10,854	11,120	8,703	26%

Source: QEIDB all accepted claims, as at June 2011 and subject to change over time. ABS Labour Force 6291.0.55.003. Data for construction ANZSIC2006 only.
Note: mesothelioma and asbestosis claims excluded.

OHS claim rate gap – Queensland and the rest of Australia (SWA national data)

Three digit ANZSIC 1993 level

Table 11 below displays trend data on the number of serious claims (five days or more off work) in construction in Queensland and the rest of Australia. From 2000-01 to 2008-09, the total number of serious claims increased 90 per cent in Queensland but declined by 6 per cent in the rest of Australia.

Table 11

Serious Claims[#], Construction Sectors, Queensland and Rest of Australia, 2000-01 to 2008-09, (Number, Per Cent)

	Queensland									
	2000-01	*2001-02*	*2002-03*	*2003-04*	*2004-05*	*2005-06*	*2006-07*	*2007-08*	*2008-09*	Change
Building construction	345	340	433	628	726	719	757	917	857	148%
Installation trade services	400	397	469	492	535	610	691	721	713	78%
Building completion services	310	305	377	475	431	492	556	620	629	103%
Non-building construction	558	464	319	286	295	342	392	449	506	-9%
Building structure services	162	187	242	322	321	316	447	511	480	196%
Other construction services	130	136	195	228	338	364	392	476	480	269%
Site preparation services	204	177	197	219	250	248	303	322	334	64%
Total	2,109	2,006	2,232	2,650	2,896	3,091	3,538	4,016	3,999	90%
	Rest of Australia									
	2000-01	*2001-02*	*2002-03*	*2003-04*	*2004-05*	*2005-06*	*2006-07*	*2007-08*	*2008-09*	Change
Building construction	2,417	2,003	2,008	2,070	2,232	1,995	2,044	2,018	2,128	-12%
Installation trade services	2,349	2,107	2,166	2,343	2,387	2,302	2,336	2,343	2,419	3%
Building completion services	1,587	1,458	1,370	1,431	1,425	1,413	1,376	1,292	1,353	-15%
Non-building construction	2,218	2,196	1,961	2,134	2,238	2,060	1,891	1,860	1,901	-14%
Building structure services	1,458	1,315	1,426	1,606	1,537	1,419	1,345	1,477	1,350	-7%
Other construction services	705	736	923	964	958	896	883	945	846	20%
Site preparation services	708	572	634	661	699	678	657	768	712	1%
Total	11,442	10,388	10,487	11,210	11,477	10,763	10,533	10,703	10,710	-6%

Source: SWA claim data.

Note: # Serious claims includes all accepted workers' compensation injury and disease claims for a fatality, permanent incapacity and temporary incapacity of one or more weeks time lost from work. Journey claims are excluded.

Table 12 shows time series data on the claim rate for serious claims in Queensland and the rest of Australia from 2000-01 to 2008-09 based on claim and employment data provided by SWA. At the beginning of the period, Queensland had a lower claim rate than the rest of Australia for construction as a whole. However, while the claim rate was relatively stable in Queensland over the period, the claim rate in the rest of Australia declined by a third.

There was considerable variation in the performance of construction sectors in Queensland over the period.

The claim rate increased in three sectors:

- other construction services (106%),
- building structure services (55%) and
- building construction (27%).

In the remaining sectors, the claim rate declined.

Non-building construction was the only sector in Queensland that displayed a consistently lower claim rate than the rest of Australia.

Table 12

Claim Rate, Serious Claims[#], Construction Sectors, Queensland and Rest of Australia, 2000-01 to 2008-09 (Rate per 1,000 Worker, Per Cent)

	Queensland									
	2000-01	*2001-02*	*2002-03*	*2003-04*	*2004-05*	*2005-06*	*2006-07*	*2007-08*	*2008-09*	Change
Other construction services	25.7	32.4	26.1	25.2	43.8	39.3	35.5	48.6	53.0	106%
Building structure services	24.9	28.9	41.1	36.3	25.8	28.0	32.6	44.2	38.6	55%
Site preparation services	55.2	43.5	48.1	42.1	37.9	44.7	40.5	33.7	38.1	-31%
Building completion services	34.2	31.8	45.5	34.7	22.0	34.3	36.3	34.8	29.3	-14%
Non-building construction	36.7	33.7	29.3	25.2	25.0	32.0	19.8	25.6	26.1	-29%
Installation trade services	37.3	31.3	29.3	24.7	25.5	23.2	22.1	22.8	24.2	-35%
Building construction	16.2	15.1	18.6	24.4	30.2	19.7	19.7	20.2	20.5	27%
Total	29.5	27.4	29.4	28.2	28.1	27.1	25.8	28.0	28.1	-5%
	Rest of Australia									
	2000-01	*2001-02*	*2002-03*	*2003-04*	*2004-05*	*2005-06*	*2006-07*	*2007-08*	*2008-09*	Change
Other construction services	27.5	31.1	31.2	29.5	27.7	21.2	17.7	19.1	16.1	-42%
Building structure services	48.9	43.4	44.7	38.1	34.2	32.7	30.5	32.3	30.9	-37%
Site preparation services	36.8	32.0	30.8	32.9	24.4	24.5	19.4	24.5	22.2	-40%
Building completion services	29.4	27.9	25.2	22.9	21.7	23.9	21.1	18.3	19.6	-33%
Non-building construction	57.3	62.0	57.0	63.2	61.1	54.6	43.3	47.5	40.8	-29%
Installation trade services	27.4	25.7	22.6	24.1	22.4	20.6	18.0	17.7	18.0	-34%
Building construction	21.3	16.2	18.2	16.8	17.3	14.5	14.6	13.1	13.6	-36%
Total	31.2	28.5	27.8	27.2	25.7	23.4	20.8	20.5	20.0	-36%
	Claim Rate Gap									
	2000-01	*2001-02*	*2002-03*	*2003-04*	*2004-05*	*2005-06*	*2006-07*	*2007-08*	*2008-09*	Change
Other construction services	-1.8	1.3	-5.1	-4.4	16.2	18.1	17.8	29.5	36.9	38.7
Building structure services	-24.1	-14.5	-3.6	-1.8	-8.4	-4.7	2.2	11.9	7.7	31.7
Site preparation services	18.4	11.4	17.3	9.2	13.5	20.2	21.1	9.3	15.9	-2.4
Building completion services	4.8	3.9	20.3	11.8	0.3	10.4	15.2	16.4	9.7	5.0
Non-building construction	-20.6	-28.3	-27.6	-38.0	-36.1	-22.6	-23.6	-21.9	-14.8	5.8
Installation trade services	9.9	5.6	6.8	0.6	3.1	2.6	4.1	5.1	6.2	-3.7
Building construction	-5.1	-1.1	0.3	7.5	13.0	5.1	5.1	7.1	6.9	12.0
Total	-1.7	-1.1	1.6	1.0	2.4	3.7	5.0	7.5	8.1	9.8

Source: Claim and employment data supplied by SWA.

Note: # Serious claims includes all accepted workers' compensation injury and disease claims for a fatality, permanent incapacity and temporary incapacity of one or more weeks time lost from work. Journey claims are excluded.

Claim rate per hour – serious claims

Table 13 shows the serious claim rate based on hours worked rather than persons employed. The data shows the same, but slightly less pronounced differences between the claim rate in Queensland and the rest of Australia.

Table 13

Claim Rate per Hour Worked, Serious Claims[#], Construction Sectors, Queensland and Rest of Australia, 2000-01 to 2008-09 (Claim Rate per 1000,000 Hours Worked, Per Cent)

	Queensland									
	2000-01	*2001-02*	*2002-03*	*2003-04*	*2004-05*	*2005-06*	*2006-07*	*2007-08*	*2008-09*	Change
Other construction services	1.4	1.7	1.3	1.4	2.2	2.0	1.8	2.5	2.8	91%
Building structure services	1.3	1.4	2.3	1.8	1.3	1.5	1.7	2.1	2.0	56%
Site preparation services	2.5	2.0	2.1	1.8	1.8	1.9	1.8	1.5	2.0	-20%
Building completion services	1.7	1.7	2.2	1.8	1.2	1.9	1.9	1.9	1.6	-7%
Installation trade services	1.9	1.6	1.5	1.2	1.2	1.2	1.1	1.1	1.3	-32%
Non-building construction	1.7	1.6	1.4	1.3	1.1	1.4	0.9	1.2	1.2	-29%
Building construction	0.8	0.8	0.9	1.2	1.5	0.9	1.0	1.0	1.1	33%
Total	1.5	1.4	1.4	1.4	1.4	1.3	1.3	1.4	1.4	0%
	Rest of Australia									
	2000-01	*2001-02*	*2002-03*	*2003-04*	*2004-05*	*2005-06*	*2006-07*	*2007-08*	*2008-09*	Change
Other construction services	1.4	1.6	1.6	1.5	1.5	1.1	0.9	1.0	0.8	-42%
Building structure services	2.6	2.3	2.3	1.9	1.7	1.7	1.5	1.6	1.6	-40%
Site preparation services	1.7	1.5	1.3	1.4	1.1	1.1	0.9	1.1	1.1	-35%
Building completion services	1.5	1.4	1.3	1.2	1.1	1.3	1.1	1.0	1.1	-28%
Installation trade services	1.4	1.3	1.1	1.2	1.1	1.1	0.9	0.9	0.9	-34%
Non-building construction	2.6	2.8	2.5	2.9	3.0	2.6	2.0	2.2	1.9	-30%
Building construction	1.0	0.8	0.9	0.8	0.8	0.7	0.7	0.6	0.7	-34%
Total	1.5	1.4	1.4	1.3	1.3	1.2	1.0	1.0	1.0	-35%
	Claim Rate Gap									
	2000-01	*2001-02*	*2002-03*	*2003-04*	*2004-05*	*2005-06*	*2006-07*	*2007-08*	*2008-09*	Change
Other construction services	0.1	0.1	-0.3	-0.1	0.7	0.9	0.9	1.5	2.0	1.9
Building structure services	-1.3	-0.9	0.0	-0.2	-0.4	-0.2	0.2	0.5	0.5	1.8
Site preparation services	0.8	0.5	0.8	0.4	0.7	0.8	0.9	0.4	0.9	0.1
Building completion services	0.2	0.3	0.9	0.6	0.0	0.6	0.8	0.9	0.5	0.3
Installation trade services	0.5	0.3	0.3	0.0	0.1	0.1	0.2	0.2	0.4	-0.1
Non-building construction	-0.9	-1.2	-1.1	-1.7	-1.8	-1.1	-1.1	-1.1	-0.6	0.3
Building construction	-0.2	0.0	0.0	0.4	0.6	0.2	0.3	0.3	0.4	0.6
Total	-0.1	0.0	0.1	0.1	0.1	0.1	0.2	0.3	0.5	0.5

Source: Claim and hours worked data supplied by SWA.

Note: # Serious claims includes all accepted workers' compensation injury and disease claims for a fatality, permanent incapacity and temporary incapacity of one or more weeks time lost from work. Journey claims are excluded.

Four digit ANZSIC 1993 level

Table 14 below provides details on the performance for serious claims at the four digit ANZSIC level for all sectors in construction in Queensland and the rest of Australia. The table includes an estimate of the number of claims that could be expected if Queensland construction sectors had the same claim rate as the rest of Australia.

As can been seen, five under-performing sub-sectors in Queensland when compared to the rest of Australia are highlighted in yellow:

- non-residential building construction,
- site preparation service,
- bricklaying services,
- carpentry services and
- landscaping services.

Further details about the pattern of injury and disease in the above five sub-sectors is contained in Attachment 3.

There are also some better performing sectors in Queensland, namely:

- road and bridge construction,
- non-residential building construction n.e.c. and
- concreting services.

Table 14

Sectors and Subsectors Performing Below Serious# Claim Rate Average for the Rest of Australia, 2006-07 (Number, Rate per 1,000)

Sector and Sub-sector	*Qld Labour Force*	*Qld Claim Rate*	*ROA Claim Rate*	*Qld Actual Claims*	*Qld Target Claims **	*Difference*
Building construction	**33050**	**23.1**	**20.6**	**763**	**702**	**61**
House construction	23501	11.9	12.9	279	297	-18
Residential building construction n.e.c..	1336	62.9	72.7	84	93	-9
Non-residential building construction	8213	48.7	36.9	400	328	72
Non-building Construction	**12087**	**32.4**	**58.0**	**392**	**618**	**-226**
Road and bridge construction	6242	25.8	65.3	161	331	-170
Non-building construction n.e.c..	5845	39.5	52.6	231	289	-58
Site Preparation Services	**4756**	**63.7**	**47.6**	**303**	**246**	**57**
Site preparation services	4756	63.7	47.6	303	246	57
Building Structure Services	**7139**	**62.9**	**66.3**	**449**	**467**	**-18**
Concreting services	3688	57.5	75.4	212	259	-47
Bricklaying services	1201	96.6	55.8	116	77	39
Roofing services	1224	70.3	66.0	86	82	4
Structural steel erection services	1026	34.1	55.5	35	51	-16
Installation Trade Services	**18830**	**37.3**	**36.1**	**703**	**685**	**18**
Plumbing services	4532	38.8	39.8	176	179	-3
Electrical services	10124	31.0	29.4	314	301	13
Air conditioning and heating services	3083	51.6	47.9	159	150	9
Fire and security system services	1091	49.5	39.4	54	45	9
Building Completion Services	**10177**	**56.0**	**45.1**	**570**	**487**	**83**
Plastering and ceiling services	1864	62.8	57.7	117	110	7
Carpentry services	1799	106.2	65.1	191	133	58
Tiling and carpeting services	1733	28.9	24.1	50	44	6
Painting and decorating services	4007	34.2	26.2	137	114	23
Glazing services	774	96.9	64.5	75	55	20
Other Construction Services	**6502**	**60.8**	**45.2**	**395**	**319**	**76**
Landscaping services	2854	47.0	27.8	134	92	42
Construction services n.e.c..	3648	71.5	62.3	261	236	25
Grand Total	**92541**	**38.6**	**37.5**	**3,575**	**3,498**	**77**

Source: SWA 2006-07 claim data, Census 2006 employee data from CDATA

Note: * Target claims assumes Queensland industry sectors have same claim rate average as the rest of Australia.

Serious claims includes all accepted workers' compensation injury and disease claims for a fatality, permanent incapacity and temporary incapacity of one or more weeks time lost from work. Journey claims are excluded.

Highlighted yellow sub-sectors performing significantly below ROA. Highlighted blue sub-sectors performing significantly above ROA.

Pattern of injury and disease

Table 15 shows that there is a similar pattern of injury in construction in Queensland and the rest of Australia. However, Queensland tends to have a higher proportion of less-serious strains and sprains and a slightly lower proportion of more-serious musculoskeletal-related disorders.

Table 15

Construction, Types of Injury[#], Qld and Rest of Australia

	Number		Per Cent	
Nature of injury	Qld	ROA	Qld	ROA
Sprains and strains of joints and adjacent muscles	1,651	3,625	46%	34%
Open wound not involving traumatic amputation	452	1,389	13%	13%
Fractures	430	1,190	12%	11%
Contusion with intact skin surface and crushing injury	173	735	5%	7%
Dorsopathies - disorders of vertebrae and discs	117	669	3%	6%
Disorders of muscle, tendons and other soft tissues	133	573	4%	5%
Deafness	29	628	1%	6%
Hernia	141	333	4%	3%
Dislocation	42	231	1%	2%
Burns	44	160	1%	2%
Mechanism of Injury	Qld	ROA	Qld	ROA
Muscular stress while lifting, carrying, or putting down objects	657	1,747	18%	17%
Muscular stress handle objects not lift, carry or put down	483	1,239	14%	12%
Falls on the same level	437	1,230	12%	12%
Falls from a height	506	1,150	14%	11%
Being hit by moving objects	235	675	7%	6%
Being hit by falling objects	177	548	5%	5%
Hitting stationary objects	159	536	4%	5%
Hitting moving objects	255	437	7%	4%
Long term exposure to sounds	29	650	1%	6%
Muscular stress with no objects being handled	121	450	3%	4%
Agency of Injury	Qld	ROA	Qld	ROA
Ferrous and non-ferrous metal	295	675	8%	6%
Agency not apparent	416	474	12%	4%
Traffic and ground surfaces other	158	622	4%	6%
Ladders	176	456	5%	4%
Materials and objects nec	106	490	3%	5%
Bricks and tiles and concrete, cement and clay products, nec	118	385	3%	4%
Buildings and other structures	177	280	5%	3%
Sawn or dressed timber	140	317	4%	3%
Scaffolding	146	242	4%	2%

Source: SWA 2006-07 serious claims data.

Note: # serious claims includes all accepted workers' compensation injury and disease claims for a fatality, permanent incapacity and temporary incapacity of one or more weeks time lost from work. Journey claims are excluded.

Harm index – based on ANZSIC93 data

The harm index is a robust method of identifying under-performing sectors in construction as the seriousness of the injury is incorporated into the measure. Table 16 rank orders the value of workers' compensation claims per worker (harm index) for all sectors in Queensland for 2008-09. As displayed, the average value of workers' compensation claims per worker covered by the scheme for Queensland is $420. The six construction sectors are clustered around this mean value with a range of between $255 per worker to $610 per worker. Site preparation services ($610), non-building construction ($537) and building structure services ($471) had harm index scores above the Queensland average.

Table 16

Value of Workers' Compensation Claim by Workers, by Sector, Queensland, 2008-09

Industry	Sector	Claim $ per worker	Industry	Sector	Claim $ per worker
Manufacturing	Sheet metal product manuf'g	5,707	Construction	Installation trade services	255
Manufacturing	Fabricated metal product manuf'g	3,163	Transport & storage	Air & space transport	254
Agriculture, forestry & fishing	Aquaculture	2,792	Manufacturing	Electronic equipment manuf'g	252
Manufacturing	Petroleum refining	2,007	Cultural & recreational services	Film & video services	251
Manufacturing	Structural metal product manuf'g	1,985	Manufacturing	Bakery product manuf'g	248
Manufacturing	Basic chemical manuf'g	1,856	Retail trade	Furniture houseware & appliance retail	238
Manufacturing	Ceramic product manuf'g	1,511	Cultural & recreational services	Sport	225
Mining	Metal ore mining	1,355	Wholesale trade	Farm produce whole'g	217
Manufacturing	Prefabricated metal building manuf'g	1,350	Finance & insurance	Services to insurance	211
Manufacturing	Plastic product manuf'g	1,245	Manufacturing	Rubber product manuf'g	203
Manufacturing	Fruit & vegetable processing	1,232	Agriculture, forestry & fishing	Grain sheep & beef cattle farming	202
Manufacturing	Dairy product manuf'g	1,193	Cultural & recreational services	Gambling services	197
Manufacturing	Cement, lime,plaster & concrete product manuf'g	1,083	Manufacturing	Glass & glass product manuf'g	190
Agriculture, forestry & fishing	Poultry farming	880	Transport & storage	Road passenger transport	189
Mining	Coal mining	860	Manufacturing	Other chemical product manuf'g	187
Agriculture, forestry & fishing	Horticulture & fruit growing	807	Manufacturing	Printing & services to printing	187
Manufacturing	Meat & meat product manuf'g	792	Retail trade	Household equipment repair services	180
Manufacturing	Photographic & scientific equipment manuf'g	771	Personal & other services	Religious organisations	175
Manufacturing	Other food manuf'g	672	Transport & storage	Storage	172
Transport & storage	Other transport	662	Retail trade	Motor vehicle retail	169
Transport & storage	Road freight transport	662	Personal & other services	Other personal services	162
Transport & storage	Services to road transport	651	Retail trade	Supermarket & grocery stores	156
Wholesale trade	Food drink & tobacco whole'g	643	Education	Preschool education	154
Transport & storage	Services to water transport	642	Wholesale trade	Textile clothing & footwear whole'g	151
Manufacturing	Flour mill & cereal food manuf'g	622	Agriculture, forestry & fishing	Dairy cattle farming	147
Construction	Site preparation services	610	Health & community services	Veterinary services	147
Manufacturing	Other manuf'g	610	Communication services	Postal & courier services	136
Manufacturing	Non-metallic mineral product manuf'g n.e.c.	606	Manufacturing	Non-ferrous basic metal product manuf'g	135
Mining	Construction material mining	596	Education	Post school education	135
Personal & other services	Public order & safety services	594	Cultural & recreational services	Arts	134
Manufacturing	Motor vehicle & part manuf'g	584	Retail trade	Other personal & household good retail	126
Agriculture, forestry & fishing	Forestry & logging	576	Cultural & recreational services	Services to the arts	120
Wholesale trade	Builders supplies whole'g	570	Accom, café & restaurants	Cafes & restaurants	117
Manufacturing	Oil & fat manuf'g	546	Retail trade	Department stores	117
Construction	Non-building construction	537	Cultural & recreational services	Radio & television services	116
Manufacturing	Textile product manuf'g	526	Agriculture, forestry & fishing	Other crop growing	111
Mining	Other mining services	524	Retail trade	Clothing & soft good retail	111
Manufacturing	Other wood product manuf'g	524	Agriculture, forestry & fishing	Marine fishing	103
Cultural & recreational services	Other recreation services	523	Property & business services	Marketing & business management services	99
Property & business services	Machinery & equipment hiring & leasing	518	Manufacturing	Publishing	96
Health & community services	Community care services	500	Finance & insurance	Other insurance	94
Manufacturing	Industrial machinery & equipment manuf'g	498	Property & business services	Technical services	88
Manufacturing	Electrical equipment & appliance manuf'g	487	Retail trade	Specialised food retail	87
Personal & other services	Interest groups	476	Health & community services	Child care services	86
Mining	Exploration	473	Manufacturing	Clothing manuf'g	82
Construction	Building structure services	471	Retail trade	Recreational good retail	79
Agriculture, forestry & fishing	Services to agriculture	463	Government Admin & defence	Defence	72
Manufacturing	Furniture manuf'g	444	Property & business services	Property operators & developers	72
Government Admin & defence	Government administration	442	Health & community services	Medical & dental services	62
Transport & storage	Services to air transport	431	Finance & insurance	Deposit taking financiers	58
Total	Total	420	Property & business services	Real estate agents	55
Construction	Other construction services	410	Cultural & recreational services	Parks & gardens	54
Manufacturing	Paper & paper product manuf'g	390	Personal & other services	Personal & household goods hiring	52
Transport & storage	Rail transport	383	Finance & insurance	Other financiers	49
Wholesale trade	Household good whole'g	383	Education	School education	47
Transport & storage	Water transport	378	Electricity, gas & water supply	Water supply sewerage & drainage services	43
Wholesale trade	Mineral metal & chemical whole'g	343	Property & business services	Computer services	41
Wholesale trade	Motor vehicle whole'g	338	Electricity, gas & water supply	Gas supply	34
Transport & storage	Other services to transport	337	Property & business services	Legal & accounting services	33
Manufacturing	Beverage & malt manuf'g	337	Mining	Oil & gas extraction	29
Construction	Building construction	334	Finance & insurance	Services to finance & investment	28
Manufacturing	Sawmilling & timber dressing	332	Cultural & recreational services	Museums	21
Wholesale trade	Machinery & equipment whole'g	330	Communication services	Telecommunication services	18
Agriculture, forestry & fishing	Other livestock farming	326	Education	Other education	17
Health & community services	Hospitals & nursing homes	312	Finance & insurance	Life insurance & superannuation funds	15
Manufacturing	Other transport equipment manuf'g	311	Manufacturing	Textile fibre yarn & woven fabric manuf'g	13
Accom, café & restaurants	Clubs (hospitality)	299	Cultural & recreational services	Libraries	6
Accom, café & restaurants	Accommodation	297	Property & business services	Scientific research	6
Retail trade	Motor vehicle services	290	Finance & insurance	Financial asset investors	0
Construction	Building completion services	290	Government Admin & defence	Justice	0
Manufacturing	Basic non-ferrous metal manuf'g	290	Agriculture, forestry & fishing	Hunting & trapping	0
Manufacturing	Iron & steel manuf'g	281	Mining	Other mining	0
Health & community services	Other health services	276	Manufacturing	Leather & leather product manuf'g	0
Property & business services	Other business services	276	Manufacturing	Recorded media manuf'g & publishing	0
Wholesale trade	Other whole'g	276	Manufacturing	Petroleum & coal product manuf'g n.e.c.	0
Accom, café & restaurants	Pubs taverns & bars	264	Property & business services	Non-financial asset investors	0
Electricity, gas & water supply	Electricity supply	256	Personal & other services	Private households employing staff	0

Source: QEIDB. Data current as at February 2011 and is subject to change over time. Based on accepted workers' compensation claims, excluding commuting claims, 2008-09. ABS Labur Force Cat. No. 6291.0.55.003, employees plus own account workers.
Note: Data based on ANZSIC 1993.

SWA compensated fatalities

Table 17 shows number and claim rate of SWA compensated fatalities in construction sectors for Queensland and the rest of Australia for the period 2005-06 to 2008-09. As can be seen, the number of fatalities varies considerably year to year. Nevertheless, Queensland had a higher claim rate than the rest of Australia in most years. The sector with the highest claim rate was non-building construction.

Table 17

SWA Compensated Fatalities, Construction Sectors, Queensland and Rest of Australia (ROA), 2005-06 to 2008-09 (Number, Rate Per 100,000)

	Number					Claim Rate per 100,000				
Queensland	2005-06	2006-07	2007-08	2008-09	Total	2005-06	2006-07	2007-08	2008-09	Total
Building construction	2	1	2	1	6	4.9	2.3	3.8	2.3	3.3
Non-building Construction	2	4	2	2	10	19.3	20.4	11.1	10.0	14.7
Site Preparation Services	0	0	2	0	2	0.0	0.0	18.1	0.0	6.0
Building Structure Services	0	0	1	2	3	0.0	0.0	7.4	12.2	5.2
Installation Trade Services	1	0	0	2	3	3.4	0.0	0.0	4.8	2.1
Building Completion Services	0	0	1	2	3	0.0	0.0	4.7	8.3	3.6
Other Construction Services	3	0	2	0	5	27.1	0.0	17.1	0.0	9.7
Total	8	5	10	9	32	6.2	3.2	6.1	5.3	5.2
	Number					**Claim Rate per 100,000**				
Rest of Australia	2005-06	2006-07	2007-08	2008-09	Total	2005-06	2006-07	2007-08	2008-09	Total
Building construction	1	4	5	3	13	0.8	3.0	3.4	1.9	2.3
Non-building Construction	8	6	5	3	22	21.9	14.3	13.3	6.6	13.6
Site Preparation Services	1	2	5	3	11	3.8	6.1	16.4	10.0	9.1
Building Structure Services	2	3	2	2	9	4.7	7.1	4.5	4.8	5.3
Installation Trade Services	7	8	3	4	22	6.5	6.4	2.3	3.2	4.5
Building Completion Services	0	0	2	3	5	0.0	0.0	2.9	4.2	1.9
Other Construction Services	2	2	2	4	10	4.9	4.4	4.6	10.7	6.0
Total	21	25	24	22	92	4.7	5.2	4.8	4.3	4.7

Source: SWA fatalities data, 2005-06 to 2008-09. ABS Labour Force, employees, 6291.0.55.003, ANZSIC 1993

Notes: SWA compensated claim rate calculted as total claims 2005-06 to 2008-09 divided by sum of employment 2005-06 to 2008-09. Mesothelioma and asbestosis claims excluded.

Table 18 displays detail about the mechanisms of fatality for SWA compensated claims 2005-06 to 2008-09. Fatalities for falls from height are more prevalent in Queensland than the rest of Australia.

Table 18

Construction Fatalities, Mechanism, Queensland and Rest of Australia (ROA), SWA Compensated Claims 2005-06 to 2008-09, (Number, Rate Per 100,000)

	Claims	*Claims*	*Rate per 100,000*	
	Qld	*ROA*	*Qld*	*ROA*
Vehicle accident	8	25	1.3	1.3
Falls from a height	10	15	1.6	0.8
Unspecified mechanisms of injury	1	12	0.2	0.6
Being hit by falling objects	3	10	0.5	0.5
Contact with electricity	4	8	0.6	0.4
Being hit by moving objects	1	5	0.2	0.3
Being trapped by moving machinery	-	3	-	0.2
Muscular stress while handling objects not lift, carry or put down	2	-	0.3	-
Muscular stress while lifting, carrying, or putting down objects	1	3	0.2	0.2
Long term contact with chemicals or substances	1	3	0.2	0.2
Stepping, kneeling or sitting on objects	-	2	-	0.1
Other and multiple mechanisms of injury	-	2	-	0.1
Falls on the same level	-	2	-	0.1
Contact with hot objects	-	1	-	0.1
Being trapped between stationary and moving objects	1	-	0.2	-
Slide or cave-in	2	1	0.3	0.1
Insect and spider bites and stings	-	1	-	0.1
Contact with, or exposure to, biological factors	-	1	-	0.1
Total	34	94	5.5	4.9

Source: SWA fatalities data, 2005-06 to 2008-09. ABS Labour Force, employees, 6291.0.55.003, ANZSIC 1993
Notes: SWA compensated claim rate calculted as total claims 2005-06 to 2008-09 divided by sum of employment 2005-06 to 2008-09. Mesothelioma and asbestosis claims excluded.

Details about the agency of fatality for Queensland and the rest of Australia for SWA compensated claims 2005-06 to 2008-09 can be seen in Table 19. Fatalities due to agency of building and other structures, holes in the ground and passenger aircraft were more prevalent in Queensland than the rest of Australia. Note, however, that due to the very small number of fatalities for each agency type, these results may vary considerable from one period to the next period.

Table 19

Construction Fatalities, Agency, Queensland and Rest of Australia (ROA), SWA Compensated Claims 2005-06 to 2008-09 (Number, Rate Per 100,000)

	Claims	*Claims*	*Rate per 100,000*	
Agency	*Qld*	*ROA*	*Qld*	*ROA*
Trucks, semi-trailers, lorries	1	12	0.2	0.6
Cars, station wagons, vans, utilities	3	9	0.5	0.5
Buildings and other structures	5	4	0.8	0.2
Agency not known	-	9	-	0.5
Ladders	2	3	0.3	0.2
Holes in the ground	3	2	0.5	0.1
Traffic and ground surfaces other	-	4	-	0.2
Other outdoor environmental agencies	1	3	0.2	0.2
Distribution lines: low tension	1	3	0.2	0.2
Agency not apparent	2	1	0.3	0.1
Scaffolding	-	3	-	0.2
Passenger aircraft	3	-	0.5	-
Other electrical installation	-	3	-	0.2
Bricks and tiles and concrete, cement and clay products, n.e.c	1	2	0.2	0.1
Front-end loaders, log-handling plant, other loading plant	1	2	0.2	0.1
Vehicle wheels and tyres	-	2	-	0.1
Distribution lines: high tension	2	-	0.3	-
Ferrous and non-ferrous metal	1	1	0.2	0.1
Graders, dozers, snowploughs, other scraping plant	-	2	-	0.1
Sawn or dressed timber	-	2	-	0.1
Road rollers, compactors	1	1	0.2	0.1
Other and unspecified powered workshop and worksite equipment	-	2	-	0.1
Other agencies, not elsewhere classified	-	2	-	0.1
Mobile ramps and stairways	2	-	0.3	-
Wheelbarrows	1	-	0.2	-
Nails, screws, nuts and bolts	-	1	-	0.1
Non-bituminous hydrocarbon fuels	-	1	-	0.1
Openings in floors, walls or ceilings	-	1	-	0.1
Motorised craft	1	-	0.2	-
Materials and objects nec	-	1	-	0.1
Other crushing, pressing, rolling machinery	-	1	-	0.1
Dust, not elsewhere classified	-	1	-	0.1
Other equipment	-	1	-	0.1
Other internal traffic and floor areas	-	1	-	0.1
Other non-metallic minerals and substances	-	1	-	0.1
Cement and lime	-	1	-	0.1
Other packing and fastening equipment	1	-	0.2	-
Other powered equipment tools and appliances, n.e.c	-	1	-	0.1
Doors and windows	-	1	-	0.1
Railway, tramway lines (track and other fixtures)	-	1	-	0.1
Excavators, backhoes, other digging plant	-	1	-	0.1
Insects	-	1	-	0.1
Control apparatus	-	1	-	0.1
Shovels, spades, lawnedgers	1	-	0.2	-
Steps and stairways	-	1	-	0.1
Biological agencies	-	1	-	0.1
Trains	-	1	-	0.1
Abrasive, planing, cutting powered tools	-	1	-	0.1
Turbines, generators	-	1	-	0.1
Vegetation	1	-	0.2	-
Fire, flame and smoke	-	1	-	0.1
Grand Total	34	94	5.5	4.9

Source: SWA fatalities data, 2005-06 to 2008-09. ABS Labour Force, employees, 6291.0.55.003, ANZSIC 1993

Notes: SWA compensated claim rate calculted as total claims 2005-06 to 2008-09 divided by sum of employment 2005-06 to 2008-09. Mesothelioma and asbestosis claims excluded.

Table 20 shows the main breakdown agencies causing work fatalities for SWA compensated claims 2005-06 to 2008-09. Fatalities due to the outdoor environment are more prevalent in Queensland than the rest of Australia.

Table 20

Construction Fatalities, Breakdown Agency, Queensland and Rest of Australia (ROA), SWA Compensated Claims 2005-06 to 2008-09 (Number, Per Cent)

	Claims	*Claims*	*Rate per 100,000*	
Breakdown Agency	*Qld*	*ROA*	*Qld*	*ROA*
Road transport	4	22	0.6	1.1
Outdoor environment	9	10	1.5	0.5
Other and unspecified agencies	2	12	0.3	0.6
Ladders, mobile ramps and stairways, and scaffolding	4	9	0.6	0.5
Electrical installation	2	7	0.3	0.4
Self-propelled plant	2	4	0.3	0.2
Other materials and objects	1	4	0.2	0.2
Non-metallic minerals and substances	1	4	0.2	0.2
Workshop and worksite tools and equipment	-	3	0	0.2
Air transport	3	-	0.5	0
Human agencies	1	1	0.2	0.1
Semi-portable plant	1	1	0.2	0.1
Fastening, packing and packaging equipment	1	1	0.2	0.1
Indoor environment	-	2	0	0.1
Rail transport	-	2	0	0.1
Other substances	-	2	0	0.1
Other non-powered equipment	-	2	0	0.1
Crushing, pressing, rolling machinery	-	1	0	0.1
Other mobile plant	1	-	0.2	0
Other powered equipment, tools and appliances	-	1	0	0.1
Furniture and fittings	-	1	0	0.1
Biological agencies	-	1	0	0.1
Other live animals	-	1	0	0.1
Other basic chemicals	-	1	0	0.1
Cooling, refrigeration plant and equipment	-	1	0	0.1
Handtools, non-powered, edged	1	-	0.2	0
Water transport	1	-	0.2	0
Grand Total	34	95	5.2	4.9

Source: SWA fatalities data, 2005-06 to 2008-09. ABS Labour Force, employees, 6291.0.55.003, ANZSIC 1993

Notes: SWA compensated claim rate calculted as total claims 2005-06 to 2008-09 divided by sum of employment 2005-06 to 2008-09. Mesothelioma and asbestosis claims excluded.

Detailed analysis - occupations

Occupational claim rates

Table 21 below displays trend data on the number of claim in construction occupations in Queensland and the rest of Australia from 2000-01 to 2008-09. The data indicates that most injuries affected tradespersons, labourers and intermediate and transport workers. Queensland experienced an increase in claims for all occupational categories over the period. In contrast, in the rest of Australia there was a decrease in the number of claims for most occupational categories.

Table 21

Serious Claims[#], Construction Occupations, Queensland and Rest of Australia, 2000-01 to 2008-09 (Number, Per Cent)

	Queensland									
	2000-01	*2001-02*	*2002-03*	*2003-04*	*2004-05*	*2005-06*	*2006-07*	*2007-08*	*2008-09*	Change
Tradespersons and related workers	906	858	1,019	1,190	1,229	1,423	1,804	1,984	1,896	109%
Labourers and related workers	650	674	876	1,122	1,238	1,180	1,085	1,253	1,104	70%
Intermediate production and transport workers	382	295	237	257	350	392	518	635	684	79%
Elementary clerical, sales and service workers	5	8	11	4	6	5	20	23	110	2100%
Associate professionals	39	29	37	24	33	50	48	33	83	113%
Professionals	8	17	9	12	10	9	25	31	45	463%
Managers and administrators	15	14	13	13	8	12	11	21	40	167%
Intermediate clerical, sales and service workers	7	16	19	12	16	17	25	32	25	257%
Advanced clerical and service workers	2	1	1		3	3	1	3	6	200%
Total	2,109	2,006	2,232	2,650	2,896	3,091	3,538	4,016	3,999	90%
	Rest of Australia									
	2000-01	*2001-02*	*2002-03*	*2003-04*	*2004-05*	*2005-06*	*2006-07*	*2007-08*	*2008-09*	Change
Tradespersons and related workers	5,533	4,875	4,996	5,323	5,468	5,306	5,468	5,403	5,466	-1%
Labourers and related workers	3,168	2,933	3,213	3,465	3,503	3,067	2,735	2,986	2,810	-11%
Intermediate production and transport workers	1,609	1,457	1,290	1,373	1,449	1,431	1,431	1,423	1,455	-10%
Elementary clerical, sales and service workers	176	223	46	64	83	54	52	48	49	-72%
Associate professionals	263	264	301	217	235	202	194	173	218	-17%
Professionals	185	184	146	168	181	244	249	338	363	97%
Managers and administrators	232	192	393	451	412	301	273	205	256	10%
Intermediate clerical, sales and service workers	172	166	76	108	109	130	97	89	68	-60%
Advanced clerical and service workers	27	25	18	25	26	20	17	14	14	-48%
Total	11,442	10,388	10,487	11,210	11,477	10,763	10,533	10,703	10,710	-6%

Source: Claim data supplied by SWA. ABS 6291.0.55.003 - Labour Force, all employed persons. ABS data for employees is not available.

Note: # Serious claims includes all accepted workers' compensation injury and disease claims for a fatality, permanent incapacity and temporary incapacity of one or more weeks time lost from work. Journey claims are excluded.

Table 22 shows data on the claim rate by occupation in Queensland and the rest of Australia from 2000-01 to 2008-09. As can be seen, labourers and related workers and intermediate production and transport workers had the highest claim rate as well as the biggest claim rate gap between Queensland and Australia (leaving aside clerks, few of whom work in construction).

Table 22

Claim Rate, Serious Claims[#], Construction Occupations, Queensland and Rest of Australia, 2000-01 to 2008-09 (Rate per 1,000 Workers, Per Cent)

	Queensland									
	2000-01	*2001-02*	*2002-03*	*2003-04*	*2004-05*	*2005-06*	*2006-07*	*2007-08*	*2008-09*	Change
Labourers and related workers	33.7	41.2	42.7	45.7	50.5	43.9	33.8	38.4	34.3	2%
Intermediate production and transport workers	22.4	20.0	14.6	13.5	16.1	20.0	18.6	23.2	24.9	11%
Professionals	2.6	3.6	2.5	3.2	1.6	1.5	4.1	4.4	7.4	181%
Tradespersons and related workers	14.7	13.1	14.8	15.2	13.8	14.6	17.7	18.6	16.2	11%
Elementary clerical, sales and service workers	7.4	8.0	18.3	3.0	5.6	3.1	14.5	14.6	88.0	1088%
Associate professionals	4.7	3.2	3.5	2.1	2.8	3.1	2.8	1.8	4.8	3%
Managers and administrators	1.6	1.5	1.3	1.4	0.6	0.8	0.7	1.3	2.0	28%
Intermediate clerical, sales and service workers	1.1	2.5	2.3	1.5	1.4	2.0	2.0	2.5	1.8	71%
Advanced clerical and service workers	0.2	0.1	0.1	-	0.4	0.3	0.1	0.3	0.5	142%
Total	15.6	14.7	15.1	16.2	15.5	15.4	15.8	17.2	16.2	4%
	Rest of Australia									
	2000-01	*2001-02*	*2002-03*	*2003-04*	*2004-05*	*2005-06*	*2006-07*	*2007-08*	*2008-09*	Change
Labourers and related workers	46.4	44.1	44.6	40.8	41.7	36.3	27.9	31.3	26.5	-43%
Intermediate production and transport workers	34.3	28.6	24.0	23.7	21.1	20.4	18.6	18.9	20.2	-41%
Professionals	16.3	10.4	9.9	12.0	10.1	12.3	12.0	17.8	16.6	2%
Tradespersons and related workers	20.4	17.1	16.8	17.1	17.3	15.7	15.4	14.9	14.7	-28%
Elementary clerical, sales and service workers	62.9	82.5	14.4	23.2	15.3	14.2	13.8	11.7	13.0	-79%
Associate professionals	9.1	7.9	10.1	6.0	5.1	4.4	4.2	3.6	4.8	-47%
Managers and administrators	5.1	4.5	9.3	9.6	7.7	5.8	4.9	3.3	4.0	-20%
Intermediate clerical, sales and service workers	6.5	6.7	2.9	4.0	4.2	5.4	3.8	3.0	2.7	-59%
Advanced clerical and service workers	0.8	0.7	0.6	0.8	0.8	0.5	0.6	0.4	0.4	-44%
Total	21.4	18.7	18.4	18.3	17.7	15.9	14.8	14.7	14.5	-32%
	Claim Rate Gap									
	2000-01	*2001-02*	*2002-03*	*2003-04*	*2004-05*	*2005-06*	*2006-07*	*2007-08*	*2008-09*	Change
Labourers and related workers	-12.7	-2.9	-1.9	4.9	8.8	7.6	5.9	7.1	7.8	20.4
Intermediate production and transport workers	-11.8	-8.6	-9.3	-10.2	-5.0	-0.4	0.1	4.3	4.7	16.6
Professionals	-13.6	-6.8	-7.4	-8.9	-8.4	-10.7	-7.9	-13.4	-9.2	4.5
Tradespersons and related workers	-5.8	-4.0	-2.0	-1.9	-3.5	-1.1	2.3	3.7	1.5	7.3
Elementary clerical, sales and service workers	-55.5	-74.5	4.0	-20.2	-9.7	-11.1	0.8	2.9	75.0	130.5
Associate professionals	-4.4	-4.7	-6.6	-4.0	-2.3	-1.3	-1.5	-1.8	0.0	4.4
Managers and administrators	-3.5	-3.0	-8.1	-8.2	-7.1	-5.0	-4.1	-2.1	-2.0	1.5
Intermediate clerical, sales and service workers	-5.4	-4.2	-0.6	-2.6	-2.8	-3.4	-1.8	-0.5	-0.9	4.6
Advanced clerical and service workers	-0.6	-0.6	-0.5	-0.8	-0.5	-0.3	-0.5	-0.2	0.1	0.7
Total	-5.8	-4.0	-3.3	-2.2	-2.1	-0.5	1.1	2.5	1.8	7.6

Source: Claim data supplied by SWA. ABS 6291.0.55.003 - Labour Force, all employed persons. ABS data for employees is not available.

Note: # Serious claims includes all accepted workers' compensation injury and disease claims for a fatality, permanent incapacity and temporary incapacity of one or more weeks time lost from work. Journey claims are excluded.

Three digit ASCO level

Table 23 shows details about claims, employment and the claim rate for select construction occupations in Queensland and the rest of Australia of 2006-07 based on the ABS Australian Standard Classification of Occupations (ASCO) at the three digit level.

The occupations recording the highest number of claims were:

- carpentry and joinery tradespersons (475 in Qld and 1,243 in ROA),
- other miscellaneous labourers and related workers (206 in Qld and 857 in ROA),
- plumbers (188 in Qld and 795 in ROA),
- electricians (239 in Qld and 691 in ROA),
- construction and plumbers assistants (571 in Qld and 564 in ROA),
- other miscellaneous tradespersons and related workers (31 in Qld and 471 in ROA) and
- concreters (188 in Qld and 338 in ROA).

There are several Queensland occupations with a high claim rate, compared to the rest of Australia:

- construction and plumbers assistants (88.0 versus 32.0),
- concreters (51.8 versus 39.3),
- structural steel construction workers (63.9 versus 44.2) and
- bricklayers (69.2 versus 36.4).

Table 23

Serious Claims[#], Employees and Claim Rate, Top Ranking Construction Occupations, Queensland and Rest of Australia, 2006-07 (Number, Claim Rate per 1,000 workers)

	Claims		Employees		Claim rate	
	Qld	ROA	Qld	ROA	Qld	ROA
Carpentry and joinery tradespersons	475	1,243	9,435	27,009	50.3	46.0
Other miscellaneous labourers and related workers	206	857	975	2,232	211.3	384.1
Plumbers	188	795	5,039	21,648	37.3	36.7
Electricians	239	691	7,696	24,503	31.1	28.2
Construction and plumbers assistants	571	564	6,485	17,613	88.0	32.0
Other miscellaneous tradespersons and related workers	31	471	44	145	704.5	3,250.4
Concreters	188	338	3,631	8,598	51.8	39.3
Truck drivers	87	318	1,676	4,960	51.9	64.1
Other mining, construction and related labourers	17	317	632	1,707	26.9	185.9
Painters and decorators	128	257	4,210	9,823	30.4	26.2
Structural steel construction workers	143	254	2,238	5,749	63.9	44.2
Bricklayers	118	248	1,704	6,830	69.2	36.4
Mobile construction plant operators	59	233	3,830	10,277	15.4	22.7
Refrigeration and airconditioning mechanics	85	217	1,671	4,804	50.9	45.2
Structural steel and welding tradespersons	64	203	1,630	3,898	39.3	52.0
Building and construction managers	2	177	3,045	11,398	0.7	15.6
Gardeners	79	168	1,380	5,176	57.2	32.4
Fibrous plasterers	46	167	2,378	7,809	19.3	21.4
Roof slaters and tilers	64	152	731	2,110	87.6	72.0
Other professionals	-	151	14	45	-	3,355.6
Metal fitters and machinists	37	135	1,165	2,910	31.8	46.5
Solid plasterers	60	122	783	1,540	76.6	79.0
Other intermediate machine operators	122	115	302	839	404.0	137.0
Grand Total	3,536	10,515	94,395	286,876	37.5	36.7

Source: SWA data, 2006-07. Census data, 2006, employees only.

Note: mesothelioma and asbestosis claims excluded.

Serious claims includes all accepted workers' compensation injury and disease claims for a fatality, permanent incapacity and temporary incapacity of one or more weeks time lost from work. Journey claims are excluded.

Table 24 below provides more detail about the high claim rate for construction and plumbers assistants in Queensland. As can be seen, the high claim rate was evident in all sub-sectors except for building structure service and installation trade services.

The high claim rate for construction and plumbers assistants is unlikely to be attributable to high claim rates among labour hire workers as only 21 per cent of all serious intimated claims in 2006-07 were for labour hire workers.

Table 24

Construction and Plumbers' Assistants, Employees, Claims and Claim Rate, Queensland and Rest of Australia, 2006-07

	Employees	Employees	Claims	Claims	Claim rate	Claim rate
	Qld	ROA	Qld	ROA	Qld	ROA
Building Completion Services	388	782	23	39	59.3	49.9
Building construction	3,532	10,258	184	187	52.1	18.2
Building structure services	419	1,254	21	71	50.1	56.6
Installation trade services	349	770	12	37	34.4	48.1
Non-building construction	712	1,365	106	73	148.9	53.5
Other construction services	202	577	67	47	331.7	81.5
Site preparation services	253	1,142	48	67	189.7	58.7
Total	5,855	16,148	461	521	78.7	32.3

Source: SWA 2006-07 serious claim data, with one or more weeks absence. Journey claims excluded.

Note: asbestosis claims excluded. Excludes undefined industry sectors.

Attachment 4 contains further details about the nature, mechanism and agency of injury for each of the four occupations with especially high claim rates in Queensland:

- bricklayers,
- concreters,
- construction and plumbers assistants and
- structural steel and construction workers.

Summary

Table 25

Under-performing Sectors, Construction, Queensland

	Above Average		
	Growth in Number of Claims	Claim Rate Growth	Harm Index
Building Construction	✓	✓	
Non-Building Construction			✓
Site Preparation Services	✓		✓
Building Structure Services	✓	✓	✓
Installation Trade Services			
Building Completion Services			
Other Construction Services	✓	✓	

Note: based on ANZSIC93

Table 25 above highlights the sectors which have recorded higher than average growth in claims, growth in the claim rate and the harm index measure. As can be seen, the sector 'building structure services' has systematically recorded above average growth on all three measures.

Within building structure services, the sub-sectors experiencing sharp growth in actual claims in recent years were:

- concreting services and
- structural steel erection services.

Further evidence of the poor claims performance of this sector is that , three of the four high risk occupations are located in the building structure services:

- concreters,
- bricklayers and
- structural steel construction workers.

Explaining the high claim rate in Queensland construction

Strong employment growth may have contributed to higher claim rates

Construction has experienced particularly strong employment growth in recent years. Table 26 contains data on employment growth for the WHSQ industry groupings from 2004-05 to 2009-10. As shown, the construction grouping has recorded the second strongest employment growth over the period. However, due to the effects of the GFC, the construction grouping has recorded the second largest drop of four per cent in employment from 2008-09 to 2009-10 behind transport and storage which recorded a five per cent drop in employment.

Table 26

Employment Growth*, WHSQ Industry Groups, Queensland, 2004-05 to 2009-10#

							Change		
	2004-05	*2005-06*	*2006-07*	*2007-08*	*2008-09*	*2009-10*	*4/5 to 8/9*	*4/5 to 9/10*	*8/9 to 9/10*
Construction	166,000	178,500	200,500	209,500	213,750	205,250	29%	24%	-4%
Health and Community	415,750	443,500	467,750	495,500	516,500	528,000	24%	27%	2%
Hospitality and Recreation	395,250	416,750	439,500	455,500	451,000	467,250	14%	18%	4%
Manufacturing	172,000	155,250	164,500	162,000	161,500	158,250	-6%	-8%	-2%
Retail	408,000	416,000	432,750	438,500	437,750	447,250	7%	10%	2%
Rural	62,500	55,750	63,500	64,750	65,250	66,500	4%	6%	2%
Transport and Storage	105,750	109,250	120,250	120,500	124,500	118,750	18%	12%	-5%
Total	1,725,250	1,775,000	1,888,750	1,946,250	1,970,250	1,991,250	14%	15%	1%

Source: ABS 6291.0.55.001 data cube, ANZSIC 2006

Note: * Employment = employees + own account workers

Annual figure calculated as the average of the February, May, August and November quarters.

Total excludes sectors where there are no further details (n.f.d.).

Time series data comparing employment growth in Queensland to the rest of Australia over the period 2004-05 to 2008-09 are shown in Table 27. Compared to the rest of Australia, Queensland construction experienced particularly strong employment growth over the period.

However, since the GFC of 2008, employment levels in Queensland have dropped sharply, especially in building structure, installation and completion services.

Table 27

Construction Only Employment* Growth, Queensland and Rest of Australia, 2004-05 to 2009-10# (Number, Per Cent)

Queensland	**Number**						**Change**		
	2004-05	*2005-06*	*2006-07*	*2007-08*	*2008-09*	*2009-10*	*2004/05 to 2009/10*	*2004/05 to 2008-09*	*2008-09 to 2009-10*
Residential Building Construction	12,250	16,250	21,250	22,750	17,000	20,750	69%	39%	22%
Non-Residential Building Construction	7,000	9,500	9,500	10,250	8,500	10,000	43%	21%	18%
Heavy and Civil Engineering Construction	14,000	11,000	21,000	19,250	20,250	21,250	52%	45%	5%
Land Development and Site Preparation Services	9,750	8,500	11,500	14,000	11,500	15,000	54%	18%	30%
Building Structure Services	19,250	18,750	21,000	21,000	22,500	16,000	-17%	17%	-29%
Building Installation Services	31,500	38,500	43,250	44,750	49,000	43,250	37%	56%	-12%
Building Completion Services	42,750	38,500	39,750	42,250	45,000	38,750	-9%	5%	-14%
Other Construction Services	15,250	18,000	18,500	17,000	23,000	24,250	59%	51%	5%
Total	172,250	188,750	212,750	224,250	231,000	220,750	28%	34%	-4%
Rest of Australia	**Number**						**Change**		
	2004-05	*2005-06*	*2006-07*	*2007-08*	*2008-09*	*2009-10*	*2004/05 to 2009/10*	*2004/05 to 2008-09*	*2008-09 to 2009-10*
Residential Building Construction	49,750	52,750	48,250	61,500	61,500	62,500	26%	24%	2%
Non-Residential Building Construction	28,750	30,250	30,250	32,250	38,500	24,750	-14%	34%	-36%
Heavy and Civil Engineering Construction	36,000	37,750	45,750	40,500	48,000	48,000	33%	33%	0%
Land Development and Site Preparation Services	31,000	31,750	37,000	36,000	37,750	36,750	19%	22%	-3%
Building Structure Services	62,750	61,750	61,000	64,000	65,750	62,750	0%	5%	-5%
Building Installation Services	125,500	137,250	155,250	157,250	158,000	172,750	38%	26%	9%
Building Completion Services	123,000	127,000	129,500	135,750	139,750	129,000	5%	14%	-8%
Other Construction Services	58,000	64,750	70,750	63,750	58,750	64,250	11%	1%	9%
Total	606,000	630,000	677,750	689,750	712,750	721,000	19%	18%	1%

Source: ABS 6291.0.55.001 data cube, construction ANZSIC06 only.

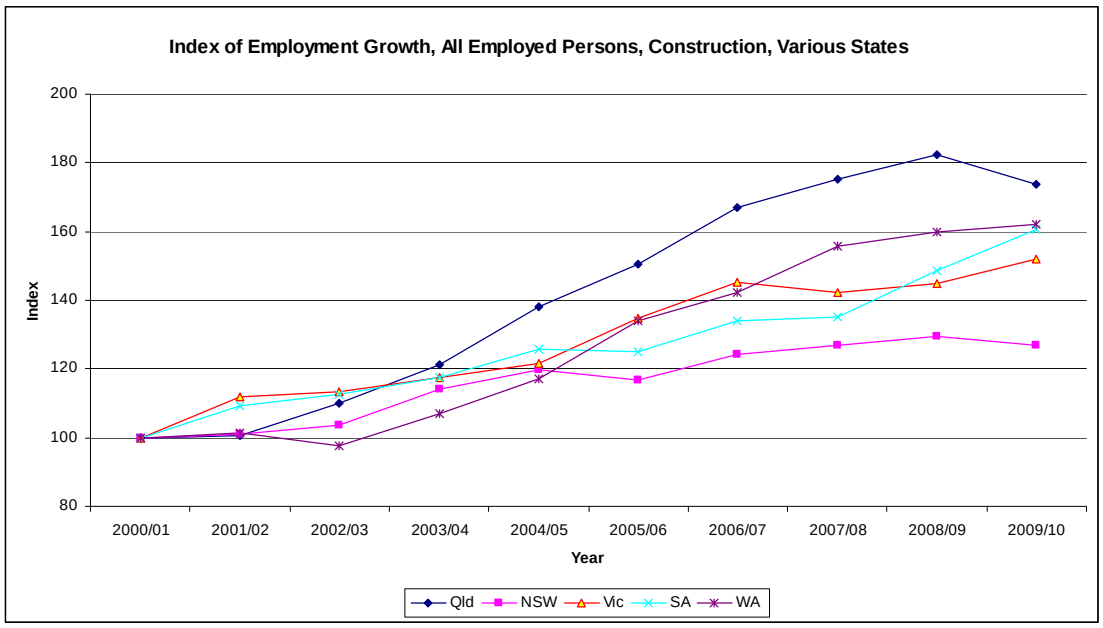
Note: * Employment = employees + own account workers

Annual figure calculated as the average of four quarters of data February, May, August and November.

Total includes sectors where there are no further details (n.f.d.) but these sectors are not displayed in table.

This pattern of employment growth and decline can be seen more clearly in Figure 1 which shows an index of employment in Queensland compared to several other states. As can be seen, the boom in employment growth from 2000-01 to 2008-09 is more pronounced in Queensland than other states. Equally, the employment drop off from 2009-10 is also more evident in Queensland than in other states.

Figure 1



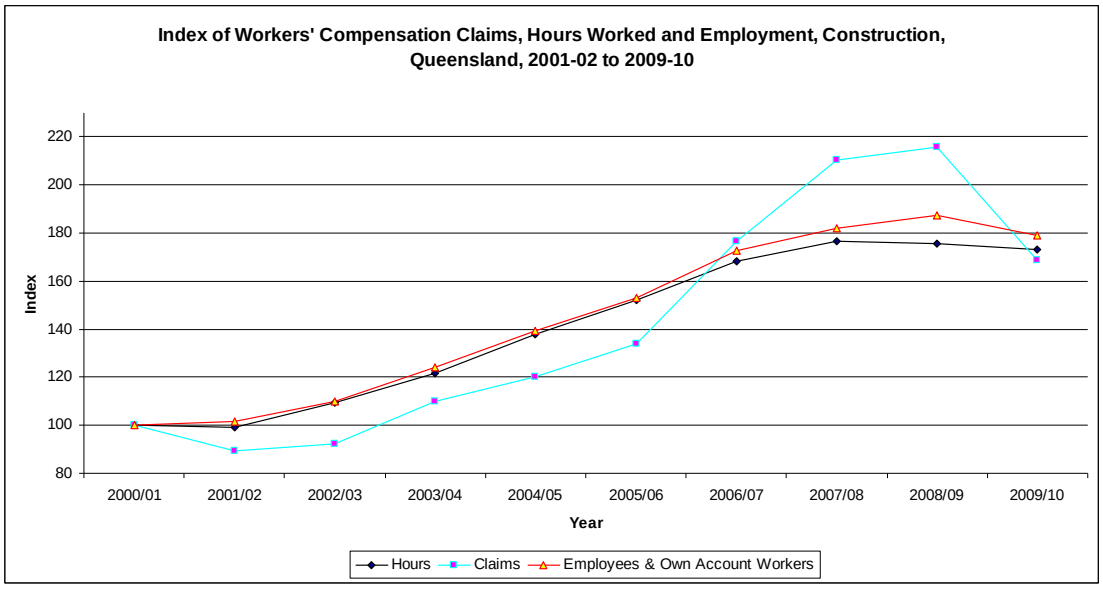
Source: dXtime database

The strong surge in employment in Queensland construction is associated with a spike of injuries at the end of the boom. This can be seen in Figure 2 which shows the indexes of workers' compensation claims, employment and hours worked 2000-01 to 2009-10. Till 2005-06, claims increased roughly in line with construction activities levels measured by employment and hours worked. However, as construction activity increased even further toward the end of the boom, claims started to increase rapidly. Post the GFC in 2008-09, there was a drop off employment and hours worked as well as a sharp decline in claims.

As will be shown in a section below, this spike in injuries leading up to the GFC may have been due to an influx of less-skilled workers into the industry due to supply shortages of experienced labour.

The data also indicates that the claims rate may be especially volatile at the end of one economic cycle and the beginning of the next.

Figure 2



Source: QEIDB, all accepted claims, as at June 2011 and subject to change over time. Employment data from ABS Labour Force 6291.0.55.003, ANZSIC2006. Hours data from dXtime.

Declining employment in construction may lead to a further decline in the claim rate
Given the preceding discussion, it is possible that workers' compensation claim rate may ease further in the short term if construction employment in Queensland continues to decline.

Construction activity in Queensland declined 3.5 per cent in 2009-10 due to reduced activity in residential building construction (-4.1 per cent) and engineering construction (-5.2 per cent) (NIEIR, 2011).[3] Queensland construction activity is expected to decline 1.4 per cent in 2010-11 before increasing 3.3 per cent in 2011-12.

Private dwelling construction at the end of 2010 was 11 per cent below the level of a year earlier and 28 per cent below the pre-GFC peak in the third quarter in 2008. The National Institute of Economic and Industry Research (NIEIR) forecast that residential construction activity will decline 3.0 per cent for 2010-11 and rise 3.7 per cent in 2011-12.

In the non-residential sector, activity increased by 2.3 per cent in 2009-10 due to public stimulus measures such as the $16.2 billion Building the Education Revolution (BER) program. In 2009-10, public non-residential activity increased by 79 per cent whereas private sector building activity declined by 27 per cent. The effect of the public sector stimulus is forecast to increase non-residential activity 4.9 per cent in 2010-11 before declining 13.8 per cent in 2011-12 as the stimulus measures are wound back.

Engineering construction work declined 5.2 per cent in 2009-10 is forecast to decline 2.7 per cent in 20010-11 and decline further by 0.5 per cent in 2011-12.

[3] National Institute of Economic and Industry Research (2011) *Queensland and Queensland Region Construction Activity: Quarterly Projection Update – March Quarter 2011*, report prepared for the Queensland Department of Public Works, April 2011.

Employment structure

A further indicator of the strength of the construction boom over the last decade has been the strong growth in full-time rather than part-time employment in Queensland. Table 28 shows the employment structure for Queensland and the rest of Australia for the period 1989-90 to 2009-10. Over the period, full-time employment growth was stronger in Queensland than the rest of Australia. Queensland also had a higher share of full-time rather than part-time employment over the period.

The higher share of full-time employment in Queensland, compared to the rest of Australia, contributes to the high Queensland claim rate as full time employees work more hours, resulting in a greater level of exposure to risk of injury and therefore a higher claim rate accordingly.

Table 28

Change in Employment Structure, Queensland and Rest of Australia, 1989-90 to 2009-10 (Number ('000) Per Cent)

	Number					
	Qld			*ROA*		
	Full-time	Part-time	Total	Full-time	Part-time	Total
2000-01	30.1	5.3	35.3	109.6	21.7	131.3
2001-02	30.8	5.1	35.9	115.1	19.5	134.6
2002-03	34.7	5.6	40.2	128.2	21.0	149.2
2003-04	37.4	5.0	42.4	132.4	24.6	157.0
2004-05	44.0	7.2	51.2	139.3	25.2	164.5
2005-06	48.1	6.0	54.1	144.6	28.6	173.2
2006-07	50.0	6.6	56.6	149.6	26.2	175.7
2007-08	56.7	6.5	63.1	162.8	22.8	185.5
2008-09	50.1	7.3	57.4	157.6	30.8	188.3
2009-10	50.7	6.8	57.4	165.1	27.7	192.8
Change	169%	129%	163%	151%	128%	147%
	Per Cent					
	Qld			*ROA*		
	Full-time	Part-time	Total	Full-time	Part-time	Total
2000-01	85%	15%	100%	83%	17%	100%
2001-02	86%	14%	100%	86%	14%	100%
2002-03	86%	14%	100%	86%	14%	100%
2003-04	88%	12%	100%	84%	16%	100%
2004-05	86%	14%	100%	85%	15%	100%
2005-06	89%	11%	100%	83%	17%	100%
2006-07	88%	12%	100%	85%	15%	100%
2007-08	90%	10%	100%	88%	12%	100%
2008-09	87%	13%	100%	84%	16%	100%
2009-10	88%	12%	100%	86%	14%	100%

Source: dXtime

Table 29 shows that average hours worked for part-time and full-time employed persons from 2001-02 to 2009-10. The data shows that there were few differences in the average hours worked for part-time and full-time construction workers in Queensland compared to the rest of Australia. The higher claim rate in Queensland does not appear to be linked to the average hours worked by persons employed in Queensland construction.

Table 29
Average Hours Worked, Part-time and Full-time, Construction, Queensland and Rest of Australia (Hours)

	Qld Full-time	ROA Full-time	Qld Part-time	ROA Part-time
2001-02	42.2	42.1	14.9	14.6
2002-03	42.6	42.2	14.3	14.7
2003-04	42.1	42.6	15.5	15.0
2004-05	42.1	42.0	15.0	15.6
2005-06	43.0	42.2	14.6	15.5
2006-07	42.0	42.2	16.5	16.4
2007-08	42.3	42.0	15.6	16.0
2008-09	40.7	41.6	13.9	15.9
2009-10	42.3	42.0	16.4	16.6

Source: ABS, Labour Force, 6291.0.55.003, E3, employed persons

Changing age profile – more younger and older workers in construction

Table 30 provides data on the age structure of all employed persons in construction in Queensland and the rest of Australia over the period 2001-02 to 2009-10. The data indicates that for Queensland there was an increase in the proportion of younger and older workers and a decline in the proportion of prime working age workers over the period. The relative growth in employment for younger workers was more pronounced prior to the arrival of the GFC in 2008.

The same pattern of employment change was evident in the rest of Australia but to a lesser extent.

Table 30

Change in Age Structure, Construction, Queensland and Rest of Australia, 2001-02 to 2009-10 (Per Cent)

	Queensland										
	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	*Change# 2001-02 to 2009-10*	*Change# 2001-02 to 2007-08*
15 - 19	5%	5%	7%	6%	7%	7%	7%	7%	5%	1%	2%
20 - 24	10%	10%	12%	13%	12%	13%	12%	11%	11%	1%	2%
25 - 34	25%	25%	25%	25%	25%	26%	26%	26%	22%	-3%	1%
35 - 44	29%	28%	24%	23%	24%	24%	24%	24%	25%	-4%	-5%
45 - 54	23%	21%	20%	21%	21%	20%	20%	18%	21%	-1%	-2%
55 - 59	6%	6%	7%	8%	6%	7%	6%	7%	9%	3%	0%
60 - 64	3%	3%	4%	4%	3%	3%	4%	5%	5%	2%	2%
65+	1%	1%	1%	1%	1%	1%	1%	2%	1%	1%	1%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%		
	Rest of Australia										
	2001-02	*2002-03*	*2003-04*	*2004-05*	*2005-06*	*2006-07*	*2007-08*	*2008-09*	*2009-10*	*Change# 2001-02 to 2009-10*	*Change# 2001-02 to 2007-08*
15 - 19	6%	5%	5%	6%	6%	6%	7%	6%	5%	0%	1%
20 - 24	11%	11%	11%	11%	11%	12%	12%	12%	12%	1%	1%
25 - 34	26%	26%	26%	26%	25%	24%	23%	23%	24%	-2%	-2%
35 - 44	26%	27%	25%	24%	26%	25%	24%	24%	24%	-2%	-2%
45 - 54	21%	20%	21%	21%	19%	20%	20%	20%	21%	-1%	-1%
55 - 59	6%	6%	7%	7%	7%	8%	7%	8%	7%	1%	1%
60 - 64	3%	3%	3%	4%	4%	4%	4%	5%	4%	1%	1%
65+	1%	1%	1%	1%	2%	2%	2%	2%	2%	1%	1%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%		

Source: ABS, Labour Force, 6291.0.55.003, all employed persons

Note: * Per cent change. # Percentage point change.

Claim rate by age

The growth of younger and older workers in Queensland construction is not likely to have affected significantly the growth in the industry claim rate over recent years due to two contradictory effects. On the one hand, young workers in construction tend to have a higher claim rate than older workers (see Tables 31 and 32). This is particularly evident for the 20 to 24 year age group. The growth in the proportion of young workers is therefore likely to have contributed to an increase in the industry claim rate.

Conversely, older workers are less likely to be injured at work. Consequently, the growth in older workers is likely to have reduced the industry claim rate. Overall, the industry claim rate is not likely to have been influenced significantly by the growth in the proportion of older and younger workers over the period.

Table 31 shows data based on the workplace where the incident occurred. Table 32 shows data based on the employer's industry. Both tables show the same pattern.

It is also noteworthy that over the period the claim rate for younger workers to 34 years of age increased quite markedly. These data highlights the importance of paying special attention to the safety of younger workers because as their share of employment increases, so too does their likelihood of getting injured.

Table 31

Claims and Claim Rate by Age, Workplace of Incident, Queensland 2004-05 to 2008-09 (Number, Per Cent)

	Number									
Age	*2001-02*	*2002-03*	*2003-04*	*2004-05*	*2005-06*	*2006-07*	*2007-08*	*2008-09*	*2009-10*	*Change*
15 - 19	234	293	382	411	494	796	1,075	949	685	193%
20 - 24	611	687	898	975	1,149	1,545	1,805	1,862	1,392	128%
25 - 34	1,424	1,616	1,774	2,001	2,157	2,729	3,248	3,425	2,574	81%
35 - 44	1,317	1,225	1,559	1,619	1,792	2,177	2,500	2,730	2,063	57%
45 - 54	988	827	1,023	1,038	1,244	1,450	1,652	1,822	1,495	51%
55 - 59	285	260	319	324	396	453	524	556	452	59%
60 - 64	112	112	150	178	200	241	262	308	325	190%
65+	36	34	42	46	62	87	87	92	123	242%
Total	5,007	5,054	6,147	6,592	7,494	9,478	11,153	11,744	9,109	82%
	Claim rate									
Age	*2001-02*	*2002-03*	*2003-04*	*2004-05*	*2005-06*	*2006-07*	*2007-08*	*2008-09*	*2009-10*	*Change*
15 - 19	37.4	40.4	35.5	37.4	36.6	53.1	68.3	55.8	55.9	49%
20 - 24	45.3	44.3	44.3	41.1	46.9	52.8	65.0	68.3	52.5	16%
25 - 34	41.9	43.1	43.0	43.0	42.3	46.3	52.2	52.5	49.5	18%
35 - 44	33.3	29.3	39.5	37.0	36.6	40.1	43.7	46.5	35.6	7%
45 - 54	31.9	26.0	30.5	27.0	28.6	32.6	34.2	39.8	29.6	-7%
55 - 59	34.5	27.4	27.1	22.7	29.9	30.7	39.5	31.8	20.3	-41%
60 - 64	32.0	24.9	23.1	23.7	29.6	34.4	26.2	25.7	29.5	-8%
65+	36.0	22.7	33.6	23.0	24.8	29.0	26.8	23.0	37.8	5%
Total	36.5	33.9	37.3	35.2	36.7	41.8	46.9	47.5	38.6	6%

Source: QEIDB, all accepted claims, as at December 2010; ABS, Labour Force, 6291.0.55.003, all employed persons.

Table 32

Claims and Claim Rate by Age, Industry of Employer, Queensland, 2004-05 to 2008-09 (Number, Per Cent)

	Number									
Age	*2001-02*	*2002-03*	*2003-04*	*2004-05*	*2005-06*	*2006-07*	*2007-08*	*2008-09*	*2009-10*	*Change*
15 - 19	232	287	358	391	459	779	1,057	927	666	187%
20 - 24	588	658	836	951	1,096	1,517	1,779	1,798	1,343	128%
25 - 34	1,376	1,561	1,701	1,945	2,076	2,663	3,208	3,299	2,490	81%
35 - 44	1,211	1,163	1,447	1,532	1,680	2,104	2,454	2,550	1,972	63%
45 - 54	861	759	912	949	1,094	1,372	1,575	1,645	1,376	60%
55 - 59	240	237	283	276	321	414	486	484	396	65%
60 - 64	89	98	126	139	155	206	237	250	273	207%
65+	33	34	38	29	37	59	62	71	98	197%
Total	4,630	4,797	5,701	6,212	6,918	9,114	10,858	11,024	8,614	86%
	Claim rate									
Age	*2001-02*	*2002-03*	*2003-04*	*2004-05*	*2005-06*	*2006-07*	*2007-08*	*2008-09*	*2009-10*	*Change*
15 - 19	37.1	39.6	33.3	35.5	34.0	51.9	67.1	54.5	54.4	46%
20 - 24	43.6	42.5	41.3	40.0	44.7	51.9	64.1	66.0	50.7	16%
25 - 34	40.5	41.6	41.2	41.8	40.7	45.1	51.5	50.6	47.9	18%
35 - 44	30.7	27.9	36.6	35.0	34.3	38.8	42.9	43.4	34.0	11%
45 - 54	27.8	23.9	27.2	24.6	25.1	30.8	32.6	36.0	27.2	-2%
55 - 59	29.1	24.9	24.1	19.4	24.2	28.1	36.7	27.7	17.8	-39%
60 - 64	25.4	21.8	19.4	18.5	23.0	29.4	23.7	20.8	24.8	-2%
65+	33.0	22.7	30.4	14.5	14.8	19.7	19.1	17.8	30.2	-9%
Total	33.8	32.1	34.6	33.2	33.9	40.2	45.7	44.5	36.5	8%

Source: QEIDB, all accepted claims, as at December 2010; ABS, Labour Force, 6291.0.55.003, all employed persons

Changing occupational structure contributes to Queensland high claim rate

The growth in the claim rate in construction in Queensland in recent years may have been due to an influx of unskilled workers into the industry.

The ABS Australian and New Zealand Classification of Occupations (ANZSCO) is a classification system for occupations which can be used as a proxy for skill levels. The more skilled occupations include managers, professionals and technical and trade workers. Workers with an intermediate level of skill include community and personal service workers, and clerical and administrative workers. The least skilled occupations include sales workers, machinery operator and drivers and labourers.

Table 33 compares the change in the occupational structure in the construction industry in Queensland with the construction industry in the rest of Australia for the period 2001-02 to 2009-10. For 2009-10 among blue collar workers, technical and trade workers made up a smaller proportion of the Queensland construction labour force (45%) than was the case in the construction industry in the rest of Australia (52%). Conversely, labourers comprised a larger proportion of the Queensland construction labour force (18%) compared to the rest of Australia (15%).

From 2001-02 to 2009-10, the proportion of workers engaged in more skilled technical and trades jobs in construction in Queensland declined by 5 percentage points. In contrast, the lower skilled labourers' share of Queensland construction employment increased four percentage points. This change in the occupational structure was more pronounced in Queensland than was the case for the rest of Australia. As a result, this influx of less-skilled workers into the construction industry in Queensland may have contributed partly to the worsening claims rate to 2008-09.

Table 33

Occupational Structure, Employed Persons, Construction, Queensland and Rest of Australia, 2001-02 to 2009-10 (Number, Per Cent)

	Queensland									
	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	Change*
Managers	10.5	12.3	11.0	14.3	17.0	17.3	19.0	23.3	23.3	121%
Professionals	5.0	4.3	4.3	6.3	6.5	6.5	8.3	6.5	8.8	75%
Technicians and Trades Workers	69.8	72.5	84.0	95.5	106.0	111.5	116.3	124.3	109.0	56%
Community and Personal Service Workers	0.3	0.3	0.0	0.3	0.3	0.0	0.3	-	0.3	0%
Clerical and Administrative Workers	17.8	20.5	18.8	22.5	24.0	26.5	29.5	30.3	25.8	45%
Sales Workers	1.5	1.5	2.0	1.8	2.5	2.8	2.3	2.3	1.8	17%
Machinery Operators And Drivers	12.0	12.5	14.3	15.0	13.0	22.0	21.5	20.3	23.5	96%
Labourers	19.8	25.5	30.5	31.8	34.5	40.0	40.5	40.8	43.5	120%
Total	136.8	149.0	164.8	187.3	204.3	226.5	237.5	247.5	235.8	72%
	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	Change#
Managers	8%	8%	7%	8%	8%	8%	8%	9%	10%	2%
Professionals	4%	3%	3%	3%	3%	3%	3%	3%	4%	0%
Technicians and Trades Workers	51%	49%	51%	51%	52%	49%	49%	50%	46%	-5%
Community and Personal Service Workers	0%	0%	0%	0%	0%	0%	0%	-	0%	0%
Clerical and Administrative Workers	13%	14%	11%	12%	12%	12%	12%	12%	11%	-2%
Sales Workers	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%
Machinery Operators And Drivers	9%	8%	9%	8%	6%	10%	9%	8%	10%	1%
Labourers	14%	17%	19%	17%	17%	18%	17%	16%	18%	4%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	
	Rest of Australia									
	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	Change*
Managers	46.5	46.8	51.8	59.5	59.0	62.5	66.8	76.5	87.5	88%
Professionals	18.5	15.8	14.8	19.5	21.0	22.3	20.8	27.3	28.3	53%
Technicians and Trades Workers	301.5	308.5	327.0	335.0	358.3	377.0	389.5	391.8	398.0	32%
Community and Personal Service Workers	1.0	0.5	0.5	1.8	1.3	1.3	1.3	0.5	0.5	-50%
Clerical and Administrative Workers	65.3	64.3	65.8	70.0	72.5	70.0	75.3	72.3	75.3	15%
Sales Workers	5.0	5.0	3.5	6.0	5.5	4.8	6.5	6.5	6.0	20%
Machinery Operators And Drivers	36.8	39.3	41.0	48.8	49.3	57.5	54.0	54.5	57.5	56%
Labourers	82.0	88.8	104.8	105.3	106.5	121.5	120.3	125.0	115.0	40%
Total	556.5	568.8	609.3	645.8	673.3	717.0	734.3	754.3	768.3	38%
	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	Change#
Managers	8%	8%	8%	9%	9%	9%	9%	10%	11%	3%
Professionals	3%	3%	2%	3%	3%	3%	3%	4%	4%	1%
Technicians and Trades Workers	54%	54%	54%	52%	53%	53%	53%	52%	52%	-2%
Community and Personal Service Workers	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Clerical and Administrative Workers	12%	11%	11%	11%	11%	10%	10%	10%	10%	-2%
Sales Workers	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%
Machinery Operators And Drivers	7%	7%	7%	8%	7%	8%	7%	7%	7%	0%
Labourers	15%	16%	17%	16%	16%	17%	16%	17%	15%	0%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	

Source: ABS, Labour Force, 6291.0.55.003, E12

Note: * Per cent change. # Percentage point change.

Duration of employment

Further evidence of decline in the level of experience of construction workers in Queensland compared to the rest of Australia can be seen in Table 34. As shown, from 2001 to 2004, the proportion of recent entrants (with less than two years experience) in the construction industry grew from 39 to 53 per cent in Queensland and from 41 to 46 per cent in the rest of Australia. Conversely, the proportion of experienced workers with five or more years of work duration declined from 39 to 30 per cent in Queensland and 30 to 34 per cent in the rest of Australia.

As can be seen in Table 34, the proportion of new entrants was consistently higher in Queensland construction than the rest of Australia from 2004 to 2010. Conversely, compared to the rest of Australia, Queensland had a lower proportion of workers with more than five years work experience for each year 2004 to 2010 shown in Table 34.

Table 34

Duration of Employment, Construction, Qld and Rest of Australia, 2001 to 2010 (per cent)

	Queensland			*Rest of Australia*		
	<2 years	2-5 years	5+ years	<2 years	2-5 years	5+ years
2001	39%	61%	39%	41%	61%	39%
2004	53%	70%	30%	46%	66%	34%
2006	53%	69%	31%	43%	62%	38%
2007	49%	68%	32%	43%	63%	37%
2008	48%	66%	34%	42%	61%	39%
2009	46%	65%	35%	40%	61%	39%
2010	44%	69%	31%	42%	63%	37%

Source: ABS, 63590, Forms of Employment

Note: Qld data has a relative standard error of 25% to 50% and should be used with caution

Educational qualifications

Table 35 compares the formal post-school educational qualification of construction workers in Queensland and the rest of Australia using census 2006 data. Census data suggests that a slightly higher proportion of construction workers in Queensland have no post school qualification compared to the rest of Australia. Similarly, a lower proportion of Queensland construction workers have diploma or better qualification compared to the rest of Australia. It will interesting to see if this slight education gap between construction workers in Queensland and the rest of Australia has widened or narrowed in the 2011 census.

Table 35

Educational Qualifications by Occupation, 2006, Construction, Queensland and Rest of Australia (Per Cent)

	Queensland							
	Postgrad Degree	Grad Dip Grad Cert	Bachelor Degree	Adv'd Dip Diploma	Certificate	Not stated	Inadequately described	Not applicable
Managers and Administrators	2%	1%	10%	9%	53%	3%	1%	21%
Professionals	5%	2%	41%	12%	15%	2%	1%	21%
Associate Professionals	1%	1%	8%	12%	39%	3%	2%	35%
Tradespersons and Related Workers	0%	0%	1%	2%	65%	2%	1%	29%
Advanced Clerical and Service Workers	0%	0%	6%	9%	14%	4%	2%	64%
Intermediate Clerical, Sales and Service Workers	0%	1%	6%	8%	19%	3%	2%	61%
Intermediate Production and Transport Workers	0%	0%	1%	2%	27%	5%	2%	63%
Elementary Clerical, Sales and Service Workers	0%	0%	4%	6%	24%	5%	1%	60%
Labourers and Related Workers	0%	0%	1%	2%	26%	4%	1%	65%
Not stated	0%	1%	2%	2%	37%	19%	1%	39%
Inadequately described	0%	0%	4%	4%	40%	6%	2%	44%
Not applicable	0%	0%	0%	0%	0%	0%	0%	0%
Total	0%	0%	4%	4%	46%	3%	1%	41%
	Rest of Australia							
	Postgrad Degree	Grad Dip Grad Cert	Bachelor Degree	Adv'd Dip Diploma	Certificate	Not stated	Inadequately described	Not applicable
Managers and Administrators	2%	1%	12%	9%	49%	3%	1%	22%
Professionals	7%	2%	43%	14%	14%	2%	2%	16%
Associate Professionals	1%	1%	10%	14%	38%	3%	2%	31%
Tradespersons and Related Workers	0%	0%	1%	2%	63%	3%	1%	30%
Advanced Clerical and Service Workers	0%	1%	6%	10%	16%	6%	2%	59%
Intermediate Clerical, Sales and Service Workers	1%	1%	7%	9%	20%	5%	2%	56%
Intermediate Production and Transport Workers	0%	0%	1%	2%	29%	5%	2%	61%
Elementary Clerical, Sales and Service Workers	0%	0%	6%	6%	26%	5%	2%	54%
Labourers and Related Workers	0%	0%	2%	3%	26%	5%	1%	64%
Not stated	0%	0%	3%	3%	33%	18%	2%	42%
Inadequately described	1%	0%	5%	5%	38%	6%	2%	42%
Not applicable	0%	0%	0%	0%	0%	0%	0%	0%
Total	1%	0%	5%	5%	46%	3%	1%	39%

Source: Census, CDATA, ASCO2, ANZSIC96

Injury rates and the economic cycle

The growth in workers' compensation claim rate in construction in Queensland over the course of the economic boom is largely consistent with research findings. Research indicates that workers' compensation claims rates are associated with economic cycles.[4] Claim rates increase during the upswing due to the more intensive use of labour, short cutting of safety procedures and insufficient safety training. Further, new hires, engaged during the boom, have elevated claim rates. One study found that workers with less than one years experience with an employer have a 46 per cent higher claim rate than the average worker. Workers may also have less fear of filing workers' compensation claims during the boom. During the economic expansion, the overuse of machinery, without proper maintenance, and the use of outdated or unsafe plant may also contribute to the higher claim rate.

Conversely, research indicates that the claim rate tends to drop during recessions. As economic activity declines, the less experienced workers are the first to be laid off, the least safe plant is taken out of services, the pace of work is slower, rest breaks tend to be taken and safety rules observed. A number of studies have highlighted that the positive association between economic activity and claim rates is particularly evident in the construction and manufacturing industries.

[4] Asfaw A., Pana-Cryan R. and Rosa R. (2011) 'The Business Cycle and the Incidence of Workplace Injuries: Evidence from the U.S.A.', *Journal of Safety Research*, 42: 1-8.
Institute for Work and Health (2009) *Workers' Compensation and the Business Cycle – Issue Briefing*, Institute for Work and Health, March, Toronto.
WorkCover New South Wales (2009) *Impact of the Economic Cycle on WorkCover's Operations*, WorkCover New South Wales, Sydney.
Davies R. and Jones P. (2005) *Trends and Context to Rates of Workplace Injury*, prepared by Warwick Institute for Employment Research for the Health and Safety Executive.

Compliance and Investigation System Refresh (CISR) Information

Notices and directions

Tables 36 to 39 below displays data on the number of notices and directions issued by inspections in sectors of the construction industry between 2004-05 and 2009-10. As shown the overwhelming majority of notices and verbal directions were issued in three sectors:

- house construction,
- non-residential building construction and
- residential building construction n.e.c.

Over the period 2004-05 to 2009-10, there was a decline in the annual number of improvement notices (seven per cent) and no change in the number of verbal directions issued by inspectors. Conversely, over the same period, inspectors issued more infringement notices (two per cent) and prohibition notices (31 per cent).

Table 36

Improvement Notices, Construction Sectors, Queensland, 2004-05 to 2009-10 (Number)

Code	Sector	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	Total	Proportion	Change 2004-05 to 2009-10
4113	Non-residential building construction	756	816	865	887	685	789	4,798	27%	4%
4111	House construction	884	942	753	862	577	594	4,612	26%	-49%
4112	Residential building construction n.e.c..	651	707	596	496	488	362	3,300	19%	-80%
4210	Site preparation services	141	178	210	184	155	217	1,085	6%	35%
4259	Construction services n.e.c..	136	140	139	194	191	251	1,051	6%	46%
4242	Carpentry services	58	97	54	147	67	44	467	3%	-32%
4232	Electrical services	43	98	38	91	34	62	366	2%	31%
4223	Roofing services	32	68	30	61	57	54	302	2%	41%
4122	Non-building construction n.e.c.	24	69	56	58	40	78	325	2%	69%
4244	Painting and decorating services	32	33	27	35	56	62	245	1%	48%
4231	Plumbing services	38	36	21	58	18	26	197	1%	-46%
4121	Road and bridge construction	35	26	34	49	24	54	222	1%	35%
4221	Concreting services	15	45	33	33	22	81	229	1%	81%
4222	Bricklaying services	15	32	21	11	14	9	102	1%	-67%
4224	Structural steel erection services	22	15	10	28	17	25	117	1%	12%
4241	Plastering and ceiling services	5	26	12	22	9	8	82	0%	38%
4243	Tiling and carpeting services	7	15	13	22	10	8	75	0%	13%
3702	Sewage and Drainage Services	25	2	3	14	3	3	50	0%	-733%
3701	Water Supply	12	6	7	6	10	2	43	0%	-500%
3610	Electricity Supply	15	2	9	6	3	6	41	0%	-150%
4251	Landscaping services	4	7	8	7	4	8	38	0%	50%
4233	Air conditioning and heating services	2	3	7	9	8	10	39	0%	80%
4245	Glazing services	1	1	-	13	1	3	19	0%	67%
3620	Gas Supply	-	1	3	2	-	-	6	0%	-
4234	Fire and security system services	1	1	-	2	-	1	5	0%	0%
	Total	2,954	3,366	2,949	3,297	2,493	2,757	17,816	100%	-7%

CISR. The data was extracted 17 January 2011. The data in this table will not match data published earlier by WHSQ or DJAG.

Note: in CISR there is an over-representation of notices for ANZSIC codes of 4111, 4112, 4113, 4210 or 4259, because all project (notification) data supplied by Qleave which is populated into the CISR database, is attributed to one of the above five ANZSIC codes. It is to this project data that WHSQ inspectors most often record their data. It is only when inspectors are interacting with sub-contractors on any given project that their issued notices are recorded against a more specific construction ANZSIC code.

Table 37

Infringement Notices, Construction Sectors, Queensland, 2004-05 to 2009-10 (Number)

Code	Sector	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	Total	Proportion	Change 2004-05 to 2009-10
4113	Non-residential building construction	79	89	96	129	75	86	554	26%	8%
4111	House construction	68	70	79	74	66	38	395	18%	-79%
4112	Residential building construction n.e.c..	54	59	75	59	61	40	348	16%	-35%
4259	Construction services n.e.c..	18	16	16	60	30	25	165	8%	28%
4210	Site preparation services	14	15	21	34	29	25	138	6%	44%
4223	Roofing services	15	10	10	37	38	18	128	6%	17%
4242	Carpentry services	16	11	8	15	16	9	75	3%	-78%
4122	Non-building construction n.e.c..	3	9	13	18	17	11	71	3%	73%
4121	Road and bridge construction	9	10	5	8	1	10	43	2%	10%
4221	Concreting services	1	8	10	9	4	11	43	2%	91%
4231	Plumbing services	7	7	7	3	5	2	31	1%	-250%
4232	Electrical services	4	3	4	13	4	6	34	2%	33%
4244	Painting and decorating services	3	2	-	8	10	8	31	1%	63%
4241	Plastering and ceiling services	2	3	6	4	1	2	18	1%	0%
4243	Tiling and carpeting services	0	2	3	5	6	3	19	1%	100%
4222	Bricklaying services	3	3	3	2	1	2	14	1%	-50%
4224	Structural steel erection services	0	2	6	2	2	2	14	1%	100%
4233	Air conditioning and heating services	0	-	1	1	3	3	8	0%	100%
3610	Electricity Supply	0	1	-	2	1	2	6	0%	100%
3701	Water Supply	1	1	-	-	2	-	4	0%	-
3702	Sewage and Drainage Services	2	-	2	-	-	-	4	0%	-
4245	Glazing services	-	-	2	2	-	2	6	0%	-
4251	Landscaping services	-	1	-	-	1	-	2	0%	-
	Total	299	322	367	485	373	305	2,151	100%	2%

CISR. The data was extracted 17 January 2011. The data in this table will not match data published earlier by WHSQ or DJAG.

Note: in CISR there is an over-representation of notices for ANZSIC codes of 4111, 4112, 4113, 4210 or 4259, because all project (notification) data supplied by Qleave which is populated into the CISR database, is attributed to one of the above five ANZSIC codes. It is to this project data that WHSQ inspectors most often record their data. It is only when inspectors are interacting with sub-contractors on any given project that their issued notices are recorded against a more specific construction ANZSIC code.

Table 38

Prohibition Notices, Construction Sectors, Queensland, 2004-05 to 2009-10 (Number)

Code	Sector	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	Total	Proportion	Change 2004-05 to 2009-10
4113	Non-residential building construction	186	222	294	372	284	306	1,664	22%	39%
4111	House construction	249	267	250	320	227	257	1,570	21%	3%
4112	Residential building construction n.e.c..	181	210	260	243	257	177	1,328	18%	-2%
4259	Construction services n.e.c..	43	55	86	130	104	128	546	7%	66%
4210	Site preparation services	46	78	100	96	83	106	509	7%	57%
4223	Roofing services	45	68	65	97	98	80	453	6%	44%
4242	Carpentry services	51	53	38	65	57	38	302	4%	-34%
4244	Painting and decorating services	25	36	35	34	60	70	260	3%	64%
4122	Non-building construction n.e.c..	6	26	25	34	22	41	154	2%	85%
4231	Plumbing services	22	22	16	22	23	33	138	2%	33%
4221	Concreting services	13	17	25	32	15	23	125	2%	43%
4222	Bricklaying services	12	21	11	12	9	11	76	1%	-9%
4232	Electrical services	12	8	7	27	9	9	72	1%	-33%
4121	Road and bridge construction	12	6	10	20	13	25	86	1%	52%
4224	Structural steel erection services	9	12	7	16	17	11	72	1%	18%
4241	Plastering and ceiling services	6	9	8	8	7	11	49	1%	45%
4243	Tiling and carpeting services	1	5	5	10	6	4	31	0%	75%
4245	Glazing services	1		4	10	8	6	29	0%	83%
4233	Air conditioning and heating services	3	2	4	7	6	8	30	0%	63%
4251	Landscaping services	2	4	2	5	2	5	20	0%	60%
3702	Sewage and Drainage Services	5	1	3	1	2	4	16	0%	-25%
3610	Electricity Supply	1	-	1	1	1	-	4	0%	-
3701	Water Supply	-	1	-	1	1	-	3	0%	-
4234	Fire and security system services	-	-	-	1	1	-	2	0%	-
3620	Gas Supply	-	-	1	-	-	-	1	0%	-
	Total	931	1,123	1,257	1,564	1,312	1,353	7,540	100%	31%

CISR. The data was extracted 17 January 2011. The data in this table will not match data published earlier by WHSQ or DJAG.

Note: in CISR there is an over-representation of notices for ANZSIC codes of 4111, 4112, 4113, 4210 or 4259, because all project (notification) data supplied by Qleave which is populated into the CISR database, is attributed to one of the above five ANZSIC codes. It is to this project data that WHSQ inspectors most often record their data. It is only when inspectors are interacting with sub-contractors on any given project that their issued notices are recorded against a more specific construction ANZSIC code.

Table 39

Verbal Directions, Construction Sectors, Queensland, 2004-05 to 2009-10 (Number)

Code	Sector	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	Total	Proportion	Change 2004-05 to 2009-10
4111	House construction	207	178	69	64	23	102	643	22%	-103%
4112	Residential building construction n.e.c..	92	129	107	135	115	32	610	21%	-188%
4113	Non-residential building construction	131	163	15	28	21	194	552	19%	32%
3702	Sewage and Drainage Services	2	-	123	117	79	-	321	11%	-
4122	Non-building construction n.e.c..	5	22	29	39	21	18	134	5%	72%
4121	Road and bridge construction	11	8	17	44	11	19	110	4%	42%
4210	Site preparation services	20	26	7	5	6	32	96	3%	38%
4251	Landscaping services	-	1	3	11	25	-	40	1%	-
4231	Plumbing services	3	3	10	11	11	15	53	2%	80%
4223	Roofing services	9	15	8	1	1	10	44	2%	10%
4243	Tiling and carpeting services	2	1	4	15	10	2	34	1%	0%
4222	Bricklaying services	-	3	2	15	11	2	33	1%	100%
4241	Plastering and ceiling services	3	4	2	4	18	2	33	1%	-50%
4224	Structural steel erection services	-	1	6	9	7	3	26	1%	100%
4242	Carpentry services	3	9	-	3	6	2	23	1%	-50%
4244	Painting and decorating services	6	11	1	-	-	13	31	1%	54%
4232	Electrical services	4	5	1	3	4	12	29	1%	67%
4221	Concreting services	1	4	2	6	3	11	27	1%	91%
4259	Construction services n.e.c..	6	9	-	-	-	36	51	2%	83%
4234	Fire and security system services	-	-	2	3	6	-	11	0%	-
4245	Glazing services	-	-	2	6	2	-	10	0%	-
3701	Water Supply	-	2	-	2	1	-	5	0%	-
3610	Electricity Supply	-	2	2	-	-	-	4	0%	-
4233	Air conditioning and heating services	-	3	-	1	-	1	5	0%	-
3620	Gas Supply	-	-	-	-	-	1	1	0%	-
	Total	505	599	412	522	381	507	2926	100%	0%

CISR. The data was extracted 17 January 2011. The data in this table will not match data published earlier by WHSQ or DJAG.

Note: in CISR there is an over-representation of notices for ANZSIC codes of 4111, 4112, 4113, 4210 or 4259, because all project (notification) data supplied by Qleave which is populated into the CISR database, is attributed to one of the above five ANZSIC codes. It is to this project data that WHSQ inspectors most often record their data. It is only when inspectors are interacting with sub-contractors on any given project that their issued notices are recorded against a more specific construction ANZSIC code.

Types of notices and direction

The most common types of notices and verbal directions issued by inspectors are shown in tables 40 to 43. As can be seen, failure to provide effective fall protection measures was the most common category of infringement notices, prohibition notice and verbal directions issued. This is consistent with the increase in workers' compensation claims due to falls from height.

The most common categories for improvement notices issued were for workplace (electrical) installations, plant (guarding and maintenance), and construction plans and work method statements.

Notices and verbal directions pertaining to MSDs are issued rarely.

Table 40

Most Common Categories of Improvement Notices 2004-05 to 2009-10 (Number, Per Cent)

Category	*No.*	*%*
Workplace installations - electrical	2,286	14%
Plant	2,027	12%
Construction wp plans & work method statement	1,618	10%
Construction housekeeping	1,438	9%
Falls from heights	1,345	8%
Obligation	1,002	6%
Falling objects	741	4%
Work method statement	564	3%
Construction workplace amenities	502	3%
Asbestos	460	3%
Construction safety plan	441	3%
Principal contractor	439	3%
Hazardous substances	372	2%
Excavation	338	2%
Electrical	318	2%
Erector and installer of plant	181	1%
Formwork	157	1%
Site specific induction	144	1%
High risk construction activity	142	1%
Slips, trips and falls	115	1%
Manual handling	108	1%
Scaffolding	100	1%
Grand Total	16,618	100%

CISR. The data was extracted 17 January 2011. The data in this table will not match data published earlier by WHSQ or DJAG.

Table 41

Most Common Categories of Infringement Notices 2006-07 to 2009-10 (Number)

Category	*No.*	*%*
Fall protection	290	21%
Safe housekeeping	134	10%
High risk work does not conform to work methods statement	162	12%
Electrical	125	9%
Toilets	75	5%
Failed to comply with improvement notice	68	5%
Work method statement	57	4%
Induction	30	2%
Asbestos	23	2%
Total	1,388	100%

CISR. The data was extracted 17 January 2011. The data in this table will not match data published earlier by WHSQ or DJAG.

Table 42

Most Common Categories of Probition Notices 2004-05 to 2009-10 (Number, Per Cent)

Category	*No.*	*%*
Falls from heights	2,613	38%
Plant	1,135	16%
Obligation	642	9%
Asbestos	329	5%
Excavation	272	4%
Falling objects	246	4%
Principal contractor	211	3%
Construction wp plans & work method statement	174	3%
Formwork	103	1%
Person in control	92	1%
Scaffolding	90	1%
Work method statement	64	1%
Total	6,907	100%

CISR. The data was extracted 17 January 2011. The data in this table will not match data published earlier by WHSQ or DJAG.

Table 43
Most Common Categories of Verbal Directions
2004-05 to 2009-10 (Number, Per Cent)

Category	*No.*	*%*
Falls from heights	484	18%
Workplace installations	363	14%
Obligation	293	11%
Construction wp plans & work method statement	252	9%
Plant	204	8%
Construction housekeeping	132	5%
Work method statement	95	4%
Principal contractor	76	3%
Excavation	71	3%
High risk construction activity	69	3%
Ladder	46	2%
Scaffolding	45	2%
Falling objects	43	2%
Total	2,688	100%

CISR. The data was extracted 17 January 2011. The data in this table will not match data published earlier by WHSQ or DJAG.

Event activity

In CISR, an event activity pertains to a notification of an incident involving bodily harm, serious bodily harm or a fatality, or a legislatively prescribed dangerous event, or a complaint received about health and safety conditions at a workplace. Event activities include correspondence, phone calls and site visits as well as technical advice, drafting of reports, witness statements and so forth.

Table 44 below combines event activities and investigation activities to get a measure of 'reactive' activity in construction for the period 2005-06 to 2009-10.

As shown in the 2009-10 data, the majority of event and investigation activity pertained to five sub-sectors:

- non-residential building construction (1,1,09),
- construction service n.e.c. (703),
- site preparation (525),
- house construction (465) and
- residential building construction n.e.c. (358).

Over the period, event activity increased by 23 per cent. The level of activity increased till 2007-08, declined in 2008-09 before climbing again in 2009-10.

Table 44

Event/Investigation Activity, Construction Sub-sectors, Queensland, 2005-06 to 2009-10

	2005-06	*2006-07*	*2007-08*	*2008-09*	*2009-10*	*Change 2005-06 to 2009-10*
Non-residential building construction	1,121	999	1,026	1,066	1,109	-1%
Construction services n.e.c..	248	330	644	704	703	183%
Site preparation services	456	482	489	296	525	15%
House construction	498	584	642	594	465	-7%
Residential building construction n.e.c..	522	400	352	379	358	-31%
Electrical services	194	145	225	144	286	47%
Non-building construction n.e.c..	327	164	238	193	234	-28%
Roofing services	68	120	182	68	208	2
Road and bridge construction	74	80	114	337	135	1
Air conditioning and heating services	2	46	61	21	124	61
Plumbing services	62	81	101	51	116	87%
Carpentry services	38	24	54	55	109	187%
Painting and decorating services	79	80	21	86	99	25%
Electricity Supply	102	256	136	20	96	-6%
Structural steel erection services	2	22	18	5	51	2450%
Concreting services	7	43	53	41	43	514%
Bricklaying services	13	40	17	17	40	208%
Landscaping services	36	84	55	8	37	3%
Plastering and ceiling services	29	28	27	27	28	-
Water Supply	19	22	31	18	24	26%
Tiling and carpeting services	3	11	2	4	19	533%
Sewage and Drainage Services	12	5	12	8	7	-42%
Glazing services	-	2	8	5	2	-
Fire and security system services	-	-	1	1	-	-
Gas Supply	-	8	6	-	-	-
Total	3,912	4,056	4,515	4,148	4,818	23%

CISR. The data was extracted 17 January 2011. The data in this table will not match data published earlier by WHSQ or DJAG.

Advisory Activities

Table 45 contains information on advisory activity in construction sub-sectors for the period 2005-06 to 2009-10. The majority of advisory activity in 2009-10 pertained to four sub-sectors:

- non-residential building construction (558),
- house construction (199),
- construction services n.e.c. (179) and
- residential building construction n.e.c. (138).

Over the period, advisory activity increased by 170 per cent. The sector with the highest amount of advisory activity - non-residential building construction – witnessed growth of 277 per cent over the period.

Table 45

Advisory Activities, Construction Sub-sectors, Queensland, 2005-06 to 2009-10

	2005-06	*2006-07*	*2007-08*	*2008-09*	*2009-10*	*Change 2005-06 to 2009-10*
Non-residential building construction	148	144	145	556	558	277%
House construction	146	51	64	269	199	36%
Construction services n.e.c..	32	50	45	158	179	459%
Residential building construction n.e.c..	71	68	48	88	138	94%
Site preparation services	51	40	51	128	129	153%
Electrical services	39	33	62	81	96	146%
Non-building construction n.e.c..	20	11	20	51	71	255%
Road and bridge construction	10	6	10	37	71	610%
Painting and decorating services	15	4	14	42	31	107%
Landscaping services	24	20	10	15	21	-13%
Concreting services	9	2	18	17	41	356%
Plumbing services	6	3	9	44	23	283%
Roofing services	5	1	3	37	36	620%
Carpentry services	10	7	15	13	9	-10%
Air conditioning and heating services	6	4	26	2	14	133%
Electricity Supply	8	3	11	12	15	88%
Water Supply	4	1	5	13	7	75%
Bricklaying services	5	13	3	4	5	0%
Glazing services	3	6	-	1	20	567%
Fire and security system services	4	10	12	-	-	-
Gas Supply	-	6	7	5	3	-
Structural steel erection services	1	1	1	4	8	700%
Tiling and carpeting services	-	-	-	9	3	-
Plastering and ceiling services	4	1	-	3	1	-75%
Sewage and Drainage Services	1	1	-	-	4	300%
Total	622	486	579	1,589	1,682	170%

CISR. The data was extracted 17 January 2011. The data in this table will not match data published earlier by WHSQ or DJAG.

Assessment activities

Table 46 contains information on assessment activity in construction sub-sectors for the period 2005-06 to 2009-10. The majority of assessment activity in 2009-10 pertained to four sub-sectors:

- non-residential building construction (4,417),
- house construction (3,414),
- residential building construction n.e.c. (1,772) and
- site preparation services (1,377).

Over the period, assessment activity increased by 31 per cent. The sector with the highest amount of advisory activity - non-residential building construction - witnessed a growth of 48 per cent.

Table 46

Assessment Activities, Construction Sub-sectors, Queensland, 2005-06 to 2009-10

	2005-06	*2006-07*	*2007-08*	*2008-09*	*2009-10*	*Change 2005-06 to 2009-10*
Non-residential building construction	3,182	3,097	3,716	3,763	4,717	48%
House construction	3,927	3,115	4,090	2,943	3,414	-13%
Residential building construction n.e.c..	2,034	1,851	1,998	1,799	1,772	-13%
Site preparation services	987	1,129	1,448	1,249	1,377	40%
Construction services n.e.c..	442	560	1,043	1,131	1,450	228%
Non-building construction n.e.c..	270	329	515	336	563	109%
Roofing services	296	249	430	431	513	73%
Road and bridge construction	205	180	394	376	517	152%
Carpentry services	224	187	400	304	208	-7%
Painting and decorating services	161	160	259	312	411	155%
Electrical services	176	188	265	232	333	89%
Plumbing services	127	106	197	197	235	85%
Concreting services	133	101	161	144	300	126%
Bricklaying services	96	70	121	101	82	-15%
Structural steel erection services	48	53	125	79	99	106%
Plastering and ceiling services	64	32	98	83	76	19%
Tiling and carpeting services	46	58	72	45	59	28%
Landscaping services	37	34	45	68	92	149%
Electricity Supply	35	52	68	62	52	49%
Air conditioning and heating services	23	30	48	44	87	278%
Sewage and Drainage Services	23	29	35	19	49	113%
Water Supply	16	20	24	28	24	50%
Glazing services	5	15	34	23	25	400%
Fire and security system services	-	6	15	9	4	-
Gas Supply	4	9	8	1	10	150%
Total	12,561	11,660	15,609	13,779	16,469	31%

CISR. The data was extracted 17 January 2011. The data in this table will not match data published earlier by WHSQ or DJAG.

Summary

Table 47 summarises inspectorate activity by rank ordering the number of inspector activities and notices/directions in each construction sector. As can be seen, inspector activity in construction is concentrated in non-residential building construction, house construction and residential building construction n.e.c..

Table 47

Rank Order of the Most Numerous Inspectorate Activities and Notices/Directions by Construction Sectors (Rank Order)

	Activities			Notices/Directions			
Sector	Event/ Investigation	Assessment	Advisory	Improvement	Infringement	Prohibition	Verbal
Non-residential building construction	1	1	1	1	1	1	3
House construction	4	2	2	2	2	2	1
Residential building construction n.e.c..	5	3	4	3	3	3	2
Site preparation services	3	4	5	4	5	5	7
Construction services n.e.c..	2	5	3	5	4	4	19

CISR. Data was extracted 17 January and 11 July 2011. The data in this table will not match data published earlier by WHSQ.

Table 48 shows the percentage growth in the level of inspectorate activities and notices and verbal directions from 2005/06 to 2009/10. The data shows a massive increase in advisory activity. Both assessment and event/investigation activity also increased over the period.

In terms of notices/directions, from 2004-05 there was only minor change in the number of improvement and infringement notices and verbal directions issued by inspectors. Prohibition notices, however, increased by 31 per cent over the period.

Table 48

Growth in Inspectorate Activities and Notices/Directions by Construction Sectors (Per Cent)

	Activities 2005-06 to 2009-10			*Notices/Directions 2004-05 to 2009-10*			
Sector	Event/ Investigation	Assessment	Advisory	Improvement	Infringement	Prohibition	Verbal
Non-residential building construction	-1	48	277	4	8	39	32
House construction	-7	-13	36	-49	-79	3	-103
Residential building construction n.e.c..	-31	-13	94	-80	-35	-2	-188
Site preparation services	15	40	153	35	44	57	38
Construction services n.e.c..	183	228	459	40	28	66	83
Total	23	31	170	-7	2	31	0

CISR. Data was extracted 17 January and 11 July 2011. The data in this table will not match data published earlier by WHSQ.

Fatalities notified to WHSQ – not workers' compensation claims

At the 69th WHS Board meeting 23 June 2010, a report was tabled on fatalities in Queensland. Detail about each of the fatalities is contained in Attachment 5.

The report found that the most common mechanism of fatalities in the construction industry was being hit by objects (see Table 49).

Table 50 shows that the most common agent of the fatalities was mobile plant and transport which accounted for nearly half of the fatalities (45%).

Table 49: Construction industry: number of notified worker fatalities by mechanism, 2006-07 to 2008-09

Mechanism of Injury	2006/07	2007/08	2008/09	Total
Being hit by falling objects	1	2	1	4
Being hit by moving objects	0	2	2	4
Being hit	3	0	0	3
Being trapped by moving machinery or equipment	0	1	1	2
Contact with electricity	0	1	1	2
Falls from a height	0	2	0	2
Being trapped between stationary and moving objects	0	1	0	1
Heat stress	1	0	0	1
Overturns	0	1	0	1
Total	5	10	5	20

Table 50: Construction industry: number of notified worker fatalities by breakdown agency, 2006-07 to 2008-09

Breakdown agency of injury	2006/07	2007/08	2008/09	Total
Mobile plant & transport	3	5	1	9
Suspended scaffolding	0	2	0	2
Overhead distribution lines: high tension	0	1	1	2
Bridges and civil works under construction or demolition	0	0	1	1
Machinery & fixed plant	1	0	0	1
Mobile crane	0	0	1	1
Road rollers, compactor	0	1	0	1
Road transport	0	1	0	1
Switchboards and fuse boxes	0	0	1	1
Total	5	10	5	20

ATTACHMENT 1

ANZSIC 1993
The construction industry

According to the Australian Bureau of Statistics (ANZSIC 1993), the building and construction industry can be broken into the following sectors:

41 General Construction

- 411 Building Construction
  - House construction
  - Residential Building Construction n.e.c. (flats, apartments etc)
  - Non-Residential Building Construction (commercial buildings, hotel, hospitals etc.)
- 412 Non-Building Construction
  - Road and Bridge Construction
  - Non-Building Construction n.e.c. (railways, dams, water supply, etc)

42 Construction Trade Services

- 421 Site Preparation Services
  - Site Preparation Services (earthmoving, excavation, etc)
- 422 Building Structure Services
  - Concreting Services
  - Bricklaying Services
  - Roofing services
  - Structural Steel Erection Services
- 423 Installation Trade Services
  - Plumbing services
  - Electrical services
  - Air Conditioning and Heating Services
  - Fire and Security System Services
- 424 Building Completion Services
  - Plastering and Ceiling Services
  - Carpentry services
  - Tiling and carpeting services
  - Painting and decorating services
  - Glazing services
- 425 Other Construction Services
  - Landscaping Services
  - Construction Services n.e.c.

A more detailed description of these sectors is shown below:

411 Building Construction

4111 House Construction
This class consists of units mainly engaged in the construction of houses (except semi-detached houses) or in carrying out alterations, additions or renovation or general repairs to houses, or in organising or managing these activities as the prime contractor.

Primary Activities
House construction, alteration, renovation or general repair; Houses, prefabricated, assembly, erection or installation (on-site)

4112 Residential Building Construction n.e.c.
This class consists of units mainly engaged in the construction of residential buildings (except houses), or in carrying out alterations, additions or renovation or general repairs to such buildings, or in organising or managing these activities.

Primary Activities
Apartments construction; Duplex houses construction; Flats construction; High-rise flats construction; Home units construction; Repair (general) or renovation of residential buildings n.e.c.; Semi-detached houses construction

4113 Non-Residential Building Construction
This class consists of units mainly engaged in the construction of non-residential buildings such as hotels, motels, hostels, hospitals, prisons, or other institutional buildings, in carrying out alterations, additions or renovation or general repairs to such buildings, or in organising or managing their construction.

Primary Activities
Commercial buildings construction; Hotels construction; Industrial buildings construction; Institutional buildings construction; Prefabricated non-residential buildings assembly, erection or installation (on-site; except sheds, garages or carports); Religious buildings construction; Repair (general) or renovation of non-residential buildings

412 Non-Building Construction

4121 Road and Bridge Construction
This class consists of units mainly engaged in the construction or general repair of roads, bridges, aerodrome runways or parking lots, or in organising or managing their construction. The quarrying of earth, soil or filling or other construction materials carried out in conjunction with road or bridge construction by the same unit is included in this class.

Primary Activities
Aerodrome runway construction; Asphalt surfacing; Bridges construction (incl. construction from prefabricated components); Elevated highways construction; Overpasses construction; Parking lot construction (except buildings); Repair or maintenance of roads or bridges; Road construction or sealing; Road sub-base or fill quarrying (in conjunction with road construction); Viaducts construction

4122 Non-Building Construction n.e.c.
This class consists of units mainly engaged in the construction of railway permanent way, dams, irrigation systems, harbour or river works, water or gas supply systems, oil refineries (except buildings), pipelines or construction projects n.e.c., in the on-site assembly of boilers, furnaces or heavy electrical machinery from prefabricated components, or in the general repair of such structures, machinery or equipment.

Primary Activities
Boilers construction (on-site assembly from prefabricated components); Bowling greens construction; Breakwaters construction; Cable laying; Canals construction; Dams construction; Distribution lines, electricity or communication, construction; Dredging (harbours or rivers); Electrical machinery, heavy, installation (on-site assembly); Flood control systems construction; Furnaces construction (for industrial plants from prefabricated components); Golf courses construction; Harbour works construction (except buildings); Irrigation systems construction; Jetties construction; Kilns construction; Lake construction; Mine site construction n.e.c.; Oil refineries construction (except buildings); Pile driving; Pipelines construction; Railway permanent way construction; River works construction; Sewage treatment plants construction; Sewage or stormwater drainage systems construction; Sports fields construction; Swimming pools, below ground concrete or fibreglass, construction; Television or radio transmitting towers construction; Tunnels construction; Water tank construction (except of structural steel)

421 Site Preparation Services

4210 Site Preparation Services
This class consists of units mainly engaged in earthmoving work such as levelling of construction sites, excavation of foundations, trench digging or removal of overburden from mine sites. This class also includes units mainly engaged in hiring earthmoving plant with operators.

Primary Activities
Demolition of buildings or other structures; Earthmoving; Excavation; Explosives laying; Ground de-watering; Hiring earthmoving plant (with operators); Land clearing (except rural); Levelling (construction sites); Mine site preparation; Removal of overburden; Trench digging

422 Building Structure Services

4221 Concreting Services
This class consists of units mainly engaged in concreting work, concrete pouring or other concrete work on construction projects.

Primary Activities
Concrete pumping; Concrete work on construction projects; Footpaths, concrete, construction; Foundations, concrete, construction; Kerb and guttering, concrete, construction; Repair of kerbs, gutters or other concrete structural products

4222 Bricklaying Services

This class consists of units mainly engaged in bricklaying or concrete block laying.

Primary Activities
Bricklaying; Concrete block laying; Repair of brickwork; Stonework on construction projects

4223 Roofing Services
This class consists of units mainly engaged in roof tiling.

Primary Activities
Roof tiling; Metal roof fixing; Roofing materials installation n.e.c

4224 Structural Steel Erection Services
This class consists of units mainly engaged in the erection (including on-site fabrication) of metal silos, storage tanks or structural steel components for buildings or other structures such as bridges, overhead cranes or electricity transmission towers.

Primary Activities
Reinforcing steel erection; Silos, metal, erection; Storage tanks, metal, erection; Structural steel erection; Trusses or joists, steel, erection; Welding work on construction projects

423 Installation Trade Services

4231 Plumbing Services
This class consists of units mainly engaged in plumbing or draining (except sewage or stormwater drains construction) or septic tank installation. Plumbing work arising from the installation of appliances is included in this class.

Primary Activities
Drains construction, cleaning or repairing (except sewerage or stormwater drains); Gas appliance repair; Gas plumbing; Guttering, roof, installation or repair; Hot water systems installation; Plumbing (except marine); Repair of installed plumbing; Septic tank installation; Solar hot water systems installation

4232 Electrical Services
This class consists of units mainly engaged in the installation of electrical wiring or fittings in buildings or other construction projects. Electrical work arising from the installation of appliances is included in this class.

Primary Activities
Closed circuit video surveillance systems installation; Domestic exhaust fans installation; Electric light or power installation; Electric wiring installation on construction projects; Electrical work on construction projects; Repair or maintenance of electrical wiring (except of electricity transmission or distribution lines)

4233 Air Conditioning and Heating Services

This class consists of units mainly engaged in the installation of household, industrial or commercial heating, refrigeration or air conditioning equipment, or in the installation of air conditioning duct work.

Primary Activities
Air conditioning duct work installation; Air conditioning equipment installation (except motor vehicle air conditioning equipment); Coolroom refrigerator installation; Freezer room construction; Heating equipment installation (except industrial furnaces); Oil heaters installation; Refrigeration equipment installation; Temperature controlled structures installation; Ventilation equipment installation n.e.c.

4234 Fire and Security System Services
This class consists of units mainly engaged in installing fire protection, detection and control systems, and in installing security systems.

Primary Activities
Alarm system, fire, installation; Fire sprinklers, installation; Security systems, installation; Smoke detectors, installation

424 Building Completion Services

4241 Plastering and Ceiling Services
This class consists of units mainly engaged in plastering, plaster fixing or finishing.

Primary Activities
Cement rendering of buildings; Decorative plaster finishing; Fibrous plaster fixing or finishing; Plasterboard fixing or finishing; Plaster work on construction projects

4242 Carpentry Services
This class consists of units mainly engaged in carpentry work or the fixing of wooden formwork on construction projects.

Primary Activities
Carpentry work on construction projects; Flooring, wooden, fixing; Formwork, wooden, fixing; Joinery work on construction projects (on-site fabrication only); Roof trusses, wooden, fixing

4243 Tiling and Carpeting Services
This class consists of units mainly engaged in laying or setting wall or floor tiles.

Primary Activities
Carpet or carpet tile laying; Floor sanding; Floor tiling (using ceramic, concrete or cut stone tiles); Floor coverings laying n.e.c.; Linoleum or linotile fixing; Mosaic work on construction projects; Slate flooring installation; Terrazzo laying; Wall tiling (using ceramic, concrete or cut stone tiles)

4244 Painting and Decorating Services
This class consists of units mainly engaged in painting, decorating or wall papering houses or other structures.

Primary Activities
House painting; Painting of buildings or other structures; Paper hanging; Spray painting of buildings or other structures; Wall papering

4245 Glazing Services
This class consists of units mainly engaged in glazing, including glass installation and repair work.

Primary Activities
Glazing; Window curtain wall installation; Window installation; Window insulation fixing; Window frame installation

425 Other Construction Services

4251 Landscaping Services
This class consists of units mainly engaged in constructing landscapes, including landforming, provision of retaining walls and paths, garden drainage control and garden watering systems, garden features and planting. Initial planting by the same unit is included.

Primary Activities
Fence construction (except agricultural); Garden and streetscape planting; Garden design implementation; Garden drainage systems installation (except agricultural); Garden sprinkler systems installation (except irrigation systems); Landscape construction; Lawn construction; Rockery work

4259 Construction Services n.e.c.
This class consists of units mainly engaged in special trade contract work n.e.c.

Primary Activities
Awnings installation or repair; Blinds installation or repair; Cladding, metal wall or roof, fixing (to buildings); Flywire screens, shutters or blinds installation; Insulation materials installation; Petrol bowsers installation; Sand or other abrasive blasting of building exteriors; Scaffolding construction; Steam-cleaning of building exteriors; Waterproofing of buildings

ATTACHMENT 2

ANZSIC 2006
Construction industry

Construction

30 Building Construction
- 301 Residential Building Construction
  - 3011 House Construction
  - 3019 Other Residential Building Construction
- 302 Non-Residential Building Construction
  - 3020 Non-Residential Building Construction

31 Heavy and Civil Engineering Construction
- 310 Heavy and Civil Engineering Construction
  - 3101 Road and Bridge Construction
  - 3109 Other Heavy and Civil Engineering Construction

32 Construction Services
- 321 Land Development and Site Preparation Services
  - 3211 Land Development and Subdivision
  - 3212 Site Preparation Services
- 322 Building Structure Services
  - 3221 Concreting Services
  - 3222 Bricklaying Services
  - 3223 Roofing Services
  - 3224 Structural Steel Erection Services
- 323 Building Installation Services
  - 3231 Plumbing Services
  - 3232 Electrical Services
  - 3233 Air Conditioning and Heating Services
  - 3234 Fire and Security Alarm Installation Services
  - 3239 Other Building Installation Services
- 324 Building Completion Services
  - 3241 Plastering and Ceiling Services
  - 3242 Carpentry Services
  - 3243 Tiling and Carpeting Services
  - 3244 Painting and Decorating Services
  - 3245 Glazing Services
- 329 Other Construction Services
  - 3291 Landscape Construction Services
  - 3292 Hire of Construction Machinery with Operator
  - 3299 Other Construction Services n.e.c.

Non-residential building construction

Table A1 shows for serious claims the nature, mechanism and agency of serious injury in non-residential building construction for Queensland and the rest of Australia.
The main types of injury are:

- sprains and strains,
- open wounds and
- fractures.

The main mechanisms of injury are:

- muscular stress from handling, lifting, carrying or putting down objects and
- falls on the same level and from a height.

The main agencies of injury are:

- metal,
- traffic and ground surfaces
- ladders and
- building materials.

The comparison between Queensland and the rest of Australia indicates that Queensland has a higher proportion of serious sprain and strains claims and a lower proportion of more serious claims for disorders of vertebrae, discs, muscles, tendons and soft tissue. However, this may be due to the short tail nature of the Queensland workers' compensation scheme.

Table A1

Non-residential Building Construction, Pattern of Injury, 2006-07, Queensland and Rest of Australia#

	Qld	ROA	Qld	ROA
Nature of injury	Number		Per Cent	
Sprains and strains of joints and adjacent muscles	180	293	45%	33%
Open wound not involving traumatic amputation	47	106	12%	12%
Fractures	52	71	13%	8%
Contusion with intact skin surface and crushing injury excluding those with	18	49	5%	6%
Dorsopathies - disorders of the spinal vertebrae and intervertebral discs	10	69	3%	8%
Disorders of muscle, tendons and other soft tissues	18	56	5%	6%
Deafness	2	76	1%	9%
Hernia	22	28	6%	3%
Mechanism of Injury				
Muscular stress while lifting, carrying, or putting down objects	83	241	21%	18%
Muscular stress while handling objects other than lifting, carrying or putt	60	168	15%	12%
Falls on the same level	46	141	12%	11%
Falls from a height	41	113	10%	8%
Being hit by moving objects	28	74	7%	5%
Being hit by falling objects	24	71	6%	5%
Hitting stationary objects	17	50	4%	4%
Hitting moving objects	28	76	7%	6%
Agency of Injury				
Ferrous and non-ferrous metal	46	59	12%	7%
Agency not apparent	54	49	14%	6%
Traffic and ground surfaces other	21	43	5%	5%
Ladders	11	32	3%	4%
Materials and objects nec	13	49	3%	6%
Bricks and tiles and concrete, cement and clay products, not elsewhere clas	15	32	4%	4%
Buildings and other structures	19	27	5%	3%
Sawn or dressed timber	22	42	6%	5%

Source: SWA 2006-07 claim data.

Note: # serious claims includes all accepted workers' compensation injury and disease claims for a fatality, permanent incapacity and temporary incapacity of one or more weeks time lost from work. Journey claims are excluded.

Table A2 provides an overview of the most prevalent injuries and causes for all non-fatal accepted claims 2000-01 to 2008-09 for non-residential building construction. As shown, back and hand and finger injuries were the most common injury type.

Table A2

Non-residential Building Construction – Most Prevalent Injuries and Causes, 2000-01 to 2008-09, Queensland

% of total injuries	Body Part	Description of most prevalent injuries & causes
19%	Back	Sprains, strains and trauma of joints, muscles, soft tissue and back pain due to muscular stress while handling, lifting, carrying or putting down metal, timber or tools and to a lesser extent falls on the same level or from a height.
18%	Hands & fingers	Lacerations, open wounds, contusions and factures due to hitting, being hit or being trapped by metal, hammers, mallets, electric drills, power tools, timbers and nails.
9%	Eye	Eye injuries due to metal and other fragments, dust and arc welding equipment.
7%	Knee	Sprains, strains or injury to joints, muscles and ligaments due to falls on the same level and from a height and muscular stress from handling or not handling objects and from hitting objects.
6%	Shoulder	Sprains and strains of joints, muscles, ligament and tendons due to muscular stress from handling, lifting, carrying or putting down objects such as timber, metal objects and tools and to a lesser extent from falls on the same level and from a height.
6%	Leg	Lacerations and open wounds from hitting or being hit by metal objects such as bars, rods, ingots, beams, wire, wire rope, metal strapping and sheet metal.
5%	Ankle	Sprains, strains of joints, muscles, ligaments and tendon caused by falls due to traffic and ground surfaces, holes in the ground and stairs.
4%	Wrist	Lacerations, open wounds, sprains, strains and trauma to muscles, joints and ligaments and carpel tunnel syndrome, due to hitting, handling, lifting, carrying or putting down objects such as metal, abrasive, planning and cutting tools, electric drills, pneumatic tools, hammer, mallets and from falls on the same level and from a height.
3%	Foot & toes	Lacerations, open wounds, sprains, strains and contusions and factures from being hit by falling objects, stepping, kneeling or sitting on objects, falls from the same level and from a height including contact with traffic and ground surfaces, timber and metal.

Source: Queensland Employee Injury Database. Data current as at March 2011 and is subject to change over time. Based on accepted workers' compensation claims, excluding commuting claims, between 2000-01 and 2008-09.

Note: Includes organisation mainly engaged in the construction of non-residential buildings such as hotels, motels, hostels, hospitals, prisons, or other institutional buildings, in carrying out alterations, additions or renovation or general repairs to such buildings, or in organising or managing their construction. Primary activities include: commercial buildings construction; hotels construction; industrial buildings construction; institutional buildings construction; prefabricated non-residential buildings assembly, erection or installation (on-site); religious buildings construction; repair (general) or renovation of non-residential buildings.

Bricklaying Services

Table A3 shows for serious claims the nature, mechanism and agency of serious injury in bricklaying services for Queensland and the rest of Australia.

The main types of injury are:

- sprains and strains,
- open wounds and
- fractures.

The main mechanisms of injury are:

- muscular stress from handling, lifting, carrying or putting down objects and
- falls on the same level and from a height.

The main agencies of injury are:

- bricks and tiles and concrete, cement and clay products and
- metal.

The comparison between Queensland and the rest of Australia indicates that Queensland has a higher proportion of serious sprain and strains claims and a lower proportion of open wounds than the rest of Australia.

Table A3

Bricklaying Services, Pattern of Injury, 2006-07, Queensland and Rest of Australia#

Nature of injury	Qld Number	ROA	Qld Per Cent	ROA
Sprains and strains of joints and adjacent muscles	59	87	51%	35%
Open wound not involving traumatic amputation	8	34	7%	14%
Fractures	9	26	8%	11%
Contusion with intact skin surface and crushing injury excluding those with	10	11	9%	4%
Dorsopathies - disorders of the spinal vertebrae and intervertebral discs	11	9	9%	4%
Disorders of muscle, tendons and other soft tissues	4	22	3%	9%
Deafness	0	16	0%	6%
Hernia	5	10	4%	4%
Mechanism of Injury				
Muscular stress while lifting, carrying, or putting down objects	26	74	22%	20%
Muscular stress while handling objects other than lifting, carrying or putt	17	55	15%	15%
Falls on the same level	19	50	16%	13%
Falls from a height	12	34	10%	9%
Being hit by moving objects	3	12	3%	4%
Being hit by falling objects	8	26	7%	7%
Hitting stationary objects	5	20	4%	6%
Hitting moving objects	3	13	5%	3%
Agency of Injury				
Ferrous and non-ferrous metal	1	16	1%	6%
Agency not apparent	15	10	13%	4%
Traffic and ground surfaces other	9	13	8%	5%
Ladders	1	3	1%	1%
Materials and objects nec	2	6	2%	2%
Bricks and tiles and concrete, cement and clay products, not elsewhere clas	33	54	28%	22%
Buildings and other structures	1	8	1%	3%
Sawn or dressed timber	0	5	0%	2%

Source: SWA 2006-07 claim data.

Note: # serious claims includes all accepted workers' compensation injury and disease claims for a fatality, permanent incapacity and temporary incapacity of one or more weeks time lost from work. Journey claims are excluded.

Table A4 provides an overview of the most prevalent injuries and causes for all non-fatal accepted claims 2000-01 to 2008-09 for bricklaying services. As shown, back and hand and fingers injuries were the most common injury type.

Table A4

Bricklaying Services – Most Prevalent Injuries and Causes, 2000-01 to 2008-09, Queensland

% of total injuries	Body Part	Description of most prevalent injuries & causes
26%	Back	Sprains, strains to joints and muscles, soft tissue injuries, back pain, disc injuries or hernias from muscular stress from handling lifting, picking up or putting down bricks, tiles, concrete and cement products and wheelbarrows and to a lesser extent, falls on the same level and from a height.
12%	Hands & fingers	Lacerations, open wounds, contusions and factures due to hitting or being trapped by bricks, wheelbarrows, power saws, tiles, and concrete and cement products.
9%	Shoulder	Sprains, strains or trauma of joints, muscles, ligament and soft tissue plus tendonitis due to muscular stress from handling, lifting, carrying or putting down bricks, concrete, cement and falls on the same level and from a height on ground surfaces or scaffolding.
7%	Knee	Trauma, sprain, strain, or torn joints, ligaments and muscles and lacerations/contusion due to falls on the same level and from a height and to a lesser extent from muscular stress from contact with objects such as scaffolding, ground surfaces, concrete and holes in the ground.
5%	Leg	Lacerations, open wounds and fractures due to falls on the same level and from a height and hitting or being hit by stationary or moving objects such as metal, bars, rods, ingots, beams, slippery surfaces, step, stairways, scaffolding, bricks, ladders, timber and metal.
5%	Wrist	Sprains, strains and trauma of joints, muscles and soft tissue, factures, lacerations and carpal tunnel syndrome due to muscular stress which handling, lifting, carrying or putting down objects, being hit by falling objects, falls on the same level and hitting stationary objects such as bricks, tiles, cement, concrete, hand tools, traffic and ground surfaces, sheet metal and scaffolding.
5%	Ankle	Trauma, sprains and strains of joints, ligaments, muscles and tendons caused by falls on the same level and from a height on ground surfaces, stairs and scaffolding.
4%	Eye	Eye injuries due to brick, tile, cement, lime, concrete, dust and metal fragments.
4%	Abdominal muscles	Hernias due to muscular stress handling, lifting, carrying or putting down objects such as wheelbarrows, brick, tiles, concrete, cement and clay products.
3%	Foot & toes	Lacerations, open wounds, soft tissue injury and contusions due to stepping, kneeling or sitting on objects or being hit by falling objects and to a less extend falls on the same level and from a height.

Source: Queensland Employee Injury Database. Data current as at March 2011 and is subject to change over time. Based on accepted workers' compensation claims, excluding commuting claims, between 2000-01 and 2008-09.

Note: Includes organisation mainly engaged in bricklaying or concrete block laying. Primary activities include: bricklaying; concrete block laying; repair of brickwork; stonework on construction projects.

Carpentry Services

Table A5 shows for serious claims the nature, mechanism and agency of serious injury in carpentry services for Queensland and the rest of Australia.

The main types of injury are:

- sprains and strains,
- open wounds and
- fractures.

The main mechanisms of injury are:

- muscular stress from lifting, carrying or putting down objects,
- falls on the same level and from a height and
- being hit by moving objects.

The main agencies of injury are:

- building materials, especially sawn and dressed timber.

The comparison between Queensland and the rest of Australia indicates that Queensland has a higher proportion of serious sprain and strains claims and a lower proportion of open wounds than the rest of Australia.

Table A5

Carpentry Services, Pattern of Injury, 2006-07, Queensland and Rest of Australia#

	Qld	ROA	Qld	ROA
Nature of injury	Number		Per Cent	
Sprains and strains of joints and adjacent muscles	84	119	44%	27%
Open wound not involving traumatic amputation	29	96	15%	22%
Fractures	21	54	11%	12%
Contusion with intact skin surface and crushing injury excluding those with	11	24	6%	5%
Dorsopathies - disorders of the spinal vertebrae and intervertebral discs	6	18	3%	4%
Disorders of muscle, tendons and other soft tissues	4	19	2%	4%
Deafness	6	27	3%	6%
Hernia	6	15	3%	3%
Mechanism of Injury				
Muscular stress while lifting, carrying, or putting down objects	33	103	17%	16%
Muscular stress while handling objects other than lifting, carrying or putt	11	43	6%	7%
Falls on the same level	26	76	14%	11%
Falls from a height	30	85	16%	12%
Being hit by moving objects	13	58	7%	10%
Being hit by falling objects	9	36	5%	6%
Hitting stationary objects	13	43	7%	7%
Hitting moving objects	13	57	8%	10%
Agency of Injury				
Ferrous and non-ferrous metal	16	27	8%	6%
Agency not apparent	23	16	12%	4%
Traffic and ground surfaces other	5	27	3%	6%
Ladders	8	24	4%	5%
Materials and objects nec	4	18	2%	4%
Bricks and tiles and concrete, cement and clay products, not elsewhere clas	2	6	1%	1%
Buildings and other structures	17	13	9%	3%
Sawn or dressed timber	33	56	17%	13%

Source: SWA 2006-07 claim data.

Note: # serious claims includes all accepted workers' compensation injury and disease claims for a fatality, permanent incapacity and temporary incapacity of one or more weeks time lost from work. Journey claims are excluded.

Table A6 provides an overview of the most prevalent injuries and causes for all non-fatal accepted claims 2000-01 to 2008-09 for carpentry services. As shown, hand and finger and back injuries are the most common injury type.

Table A6

Carpentry Services – Most Prevalent Injuries and Causes, 2000-01 to 2008-09, Queensland

% of total injuries	Body Part	Description of most prevalent injuries & causes
23%	Hands & fingers	Lacerations, open wounds, contusions and factures due to hitting, being hit or being trapped by timber, nails, screws, nuts, bolts, hammers, mallets and metal.
14%	Back	Sprains, strains and trauma to joints, muscles, tendons and soft tissue plus back pain due to muscular stress from handling, lifting, picking up or putting down timber and manufactured board and to a lesser extent from falls on the same level and from a height.
10%	Eye	Eye injuries due to metal, dust, brick, tile and wood fragments.
6%	Leg	Lacerations and open wounds due to contact with metal and timber objects plus falls on the same level and from a height.
6%	Knee	Sprains, strains or trauma to joints, muscles and ligaments and open wounds due to falls on the same level and from a height and to a lesser extent from hitting or being hit by objects and muscular stress from contact with timber, traffic and ground surfaces and metal objects.
5%	Shoulder	Sprains, strains or trauma of joints, muscles, ligaments and soft tissue plus tendonitis or dislocation due to muscular stress from handling, lifting, carrying or putting down timber or using vehicles such as cars, station wagons, van and utilities or from falls on the same level and from a height.
5%	Ankle	Sprains, strains or trauma of joints, muscles, ligaments and soft tissue caused by falls due to traffic and ground surfaces.
4%	Foot & toes	Lacerations, open wounds, soft tissue injury and contusions due to stepping, kneeling or sitting on objects or being hit by falling objects or contact with traffic and ground surfaces and to a less extend falls on the same level and from a height.
4%	Wrist	Sprains, strains of joints, muscles and soft tissue, lacerations and factures due to falls on the same level and from a height and muscular stress which handling, lifting, carrying or putting down objects such as timber, tools, nails, screws, nuts, bolts and ladders.

Source: Queensland Employee Injury Database. Data current as at March 2011 and is subject to change over time. Based on accepted workers' compensation claims, excluding commuting claims, between 2000-01 and 2008-09.

Note: Includes organisation mainly engaged in carpentry work or the fixing of wooden formwork on construction projects. Primary activities include: carpentry work on construction projects; flooring, wooden, fixing; formwork, wooden, fixing; joinery work on construction projects (on-site fabrication only); roof trusses, wooden, fixing.

Site Preparation Services

Table A7 shows for serious claims the nature, mechanism and agency of serious injury in site preparation services for Queensland and the rest of Australia.

The main types of injury are:

- sprains and strains,
- fractures and
- open wounds.

The main mechanisms of injury are:

- muscular stress from handling, lifting, carrying or putting down objects and
- falls on the same level and from a height.

The main agencies of injury are:

- traffic and ground surfaces and
- metal.

The comparison between Queensland and the rest of Australia indicates that Queensland has a high proportion of serious sprain and strains claims.

Table A7

Site Preparation Services, Pattern of Injury, 2006-07, Queensland and Rest of Australia#

	Qld	ROA	Qld	ROA
Nature of injury	Number		Per Cent	
Sprains and strains of joints and adjacent muscles	142	259	47%	39%
Open wound not involving traumatic amputation	26	63	9%	10%
Fractures	35	84	12%	13%
Contusion with intact skin surface and crushing injury excluding those with	22	53	7%	8%
Dorsopathies - disorders of the spinal vertebrae and intervertebral discs	11	31	4%	5%
Disorders of muscle, tendons and other soft tissues	5	34	2%	5%
Deafness	1	21	0%	3%
Hernia	10	15	3%	2%
Mechanism of Injury				
Muscular stress while lifting, carrying, or putting down objects	32	102	11%	11%
Muscular stress while handling objects other than lifting, carrying or putt	55	162	18%	16%
Falls on the same level	44	128	15%	13%
Falls from a height	41	117	14%	12%
Being hit by moving objects	21	55	7%	5%
Being hit by falling objects	16	65	5%	7%
Hitting stationary objects	11	46	4%	5%
Hitting moving objects	21	27	4%	2%
Agency of Injury				
Ferrous and non-ferrous metal	15	39	5%	6%
Agency not apparent	30	34	10%	5%
Traffic and ground surfaces other	18	47	6%	7%
Ladders	3	9	1%	1%
Materials and objects nec	10	14	3%	2%
Bricks and tiles and concrete, cement and clay products, not elsewhere clas	7	21	2%	3%
Buildings and other structures	5	16	2%	2%
Sawn or dressed timber	2	14	1%	2%

Source: SWA 2006-07 claim data.

Note: # serious claims includes all accepted workers' compensation injury and disease claims for a fatality, permanent incapacity and temporary incapacity of one or more weeks time lost from work. Journey claims are excluded.

Table A8 provides an overview of the most prevalent injuries and causes for all non-fatal accepted claims 2000-01 to 2008-09 for site-preparation services. As shown, back and hand and finger injuries were the most common injury type.

Table A8

Site Preparation Services – Most Prevalent Injuries and Causes, 2000-01 to 2008-09, Queensland

% of total injuries	Body Part	Description of most prevalent injuries & causes
22%	Back	Sprains, strains and trauma of joints, muscles, soft tissue injuries and back pain due to muscular stress while handling, lifting, carrying, or putting down objects, contact with vehicles and falls from the same level and from a height.
14%	Hands & fingers	Lacerations, open wounds, contusions and factures due to hitting, being hit or being trapped by metal, hammers, mallets, electric drills, bars, rods, ingots, beams and power tools.
8%	Knee	Sprains, strains or trauma to joints, muscles and ligaments due to falls on the same level and from a height and to a lesser extent from muscular stress from contact with objects including trucks, semi-trailers, lorries, excavators, backhoes, digging plant, graders, dozers, ploughs and scraping plant.
7%	Shoulder	Sprains and strains of joints, muscles, ligament and tendons and dislocations due to muscular stress from handling, lifting, carrying or putting down objects associated with the use of vehicles such as trucks, semi-trailers, lorries, excavators, backhoes, digging plant, graders, dozers, scraping plant and to a lesser extent from falls on the same level and from a height.
6%	Ankle	Sprains, strains of joints, muscles, ligaments and tendons caused by falls due to traffic and ground surfaces, trucks, semi-trailers, lorries, excavators, backhoes, digging plant, uneven ground surfaces, holes in the ground, trenches and excavations.
5%	Eye	Eye injuries due to metal and other fragments, dust and arc welding equipment.
5%	Leg	Lacerations, open wounds, trauma to muscles, fractures, contusions and sprains and strains from falls and contact with objects such as metal, rocks, stones, boulders, trucks, semi-trailers, lorries, excavators, backhoes, digging plant, and traffic and ground surfaces.
4%	Foot & toes	Fractures, open wounds, lacerations, contusions, sprains and strains from being hit by falling or moving objects or falls on the same level and from a height, and stepping, kneeling or sitting on objects including traffic and ground surfaces, metal objects, timber and vehicles such as trucks, semi-trailers, lorries, excavators, backhoes and digging plant.
3%	Wrist	Sprains, strains and trauma of joints, muscles and ligaments, factures, tendonitis and nerve disorders due to muscular stress with handling objects, falls and hitting moving objects such as trucks, semi-trailers, lorries, hammers, mallets and ground surfaces.

Source: Queensland Employee Injury Database. Data current as at March 2011 and is subject to change over time. Based on accepted workers' compensation claims, excluding commuting claims, between 2000-01 and 2008-09.

Note: Includes organisation mainly engaged in earthmoving work such as levelling of construction sites, excavation of foundations, trench digging or removal of overburden from mine sites. This class also includes units mainly engaged in hiring earthmoving plant with operators. Primary activities include: demolition of buildings or other structures; earthmoving; excavation; explosives laying; ground de-watering; hiring earthmoving plant (with operators); land clearing (except rural); levelling (construction sites); mine site preparation; removal of overburden; trench digging.

Landscaping Service

Table A9 shows for serious claims the nature, mechanism and agency of serious injury in landscaping services for Queensland and the rest of Australia.

The main types of injury are:

- sprains and strains,
- open wounds and
- fractures.

The main mechanisms of injury are:

- muscular stress from handling, lifting, carrying or putting down objects and
- falls on the same level and from a height.

The main agencies of injury are bricks and tiles and concrete, cement and clay products.

The comparison between Queensland and the rest of Australia indicates that Queensland has a high proportion of serious sprain and strains claims.

Table A9

Landscaping Service, Pattern of Injury, 2006-07, Queensland and Rest of Australia#

	Qld	ROA	Qld	ROA
Nature of injury	Number		Per Cent	
Sprains and strains of joints and adjacent muscles	67	123	50%	45%
Open wound not involving traumatic amputation	16	56	12%	21%
Fractures	15	29	11%	11%
Contusion with intact skin surface and crushing injury excluding those with	7	17	5%	6%
Dorsopathies - disorders of the spinal vertebrae and intervertebral discs	6	9	4%	3%
Disorders of muscle, tendons and other soft tissues	4	5	3%	2%
Deafness	0	0	0%	0%
Hernia	6	7	4%	3%
Mechanism of Injury				
Muscular stress while lifting, carrying, or putting down objects	34	90	25%	21%
Muscular stress while handling objects other than lifting, carrying or putt	23	66	17%	16%
Falls on the same level	14	41	10%	10%
Falls from a height	10	26	7%	6%
Being hit by moving objects	9	40	7%	11%
Being hit by falling objects	10	24	7%	5%
Hitting stationary objects	3	15	2%	4%
Hitting moving objects	9	23	5%	6%
Agency of Injury				
Ferrous and non-ferrous metal	4	10	3%	4%
Agency not apparent	17	11	13%	4%
Traffic and ground surfaces other	8	8	6%	3%
Ladders	0	3	0%	1%
Materials and objects nec	5	6	4%	2%
Bricks and tiles and concrete, cement and clay products, not elsewhere clas	9	17	7%	6%
Buildings and other structures	5	1	4%	0%
Sawn or dressed timber	7	6	5%	2%

Source: SWA 2006-07 claim data.

Note: # serious claims includes all accepted workers' compensation injury and disease claims for a fatality, permanent incapacity and temporary incapacity of one or more weeks time lost from work. Journey claims are excluded.

Table A10 provides an overview of the most prevalent injuries and causes for all non-fatal accepted claims 2000-01 to 2008-09 for landscaping services. As shown, back and hand and finger injuries were the most common injury type.

Table A10

Landscaping Services – Most Prevalent Injuries and Causes, 2000-01 to 2008-09, Queensland

% of total injuries	Body Part	Description of most prevalent injuries & causes
25%	Back	Sprains, strains to joints and muscles, soft tissue injuries and back pain due to muscular stress from handling lifting, picking up or putting down rocks, stones, boulders, wheelbarrows, shovels, spades, lawn edgers, bricks, tiles and vegetation.
20%	Hands & fingers	Lacerations, open wounds, fractures and contusions due to hitting or being hit or trapped by tools such as hammers, mallets, powered saws and materials such as rocks, stones, boulders, metal and concrete and cement products.
7%	Knee	Sprains, strains, trauma or tears to joints, muscles, and tendons due to falls on the same level and from a height and to a lesser extent from muscular stress from handling lifting, picking up or putting down objects such as wheelbarrows, rocks, stones and boulders.
6%	Shoulder	Sprains, strains or trauma of joints, muscles, tendons and ligament due to muscular stress from handling, lifting, carrying or putting down shovels, spades, lawn edgers, wheelbarrows, timber, vegetation, bricks, tiles, rocks, stones and boulders.
6%	Ankle	Sprains, strains or trauma to joints, muscles, ligaments and soft tissue due to falls on the same level and from a height.
6%	Leg	Lacerations and open wounds due to being hit or hitting stationary or moving objects such as rocks, stones, boulders, vegetation, bars, rods, ingots, beams, trees branches, metal and knives and to a lesser extent falls on the same level and from a height.
4%	Wrist	Sprains, strains and trauma of joints and muscles, carpal tunnel syndrome, open wounds and tendonitis due to muscular stress which handling, lifting, carrying or putting down objects, being hit by or hitting moving objects such as shovels, spades, lawn edgers, hammers, mallets, grinders, wheelbarrows, trees, excavators, backhoes, digging plant, rocks, stones and boulders.
4%	Eye	Eye injuries due to fragments of metal, wood, wet concrete and dust.
4%	Foot & toes	Lacerations, contusions, sprains and strains of joints and muscles and falls on the same level and from a height associated with traffic and ground surfaces, trailers, front-end loaders, loading plant, vegetation, timber, uneven ground, nails, screws, nuts, bolts, gutters, drains, kerbs, cement products and forklift trucks.

Source: Queensland Employee Injury Database. Data current as at March 2011 and is subject to change over time. Based on accepted workers' compensation claims, excluding commuting claims, between 2000-01 and 2008-09.

Note: Includes organisation mainly engaged in constructing landscapes, including landforming, provision of retaining walls and paths, garden drainage control and garden watering systems, garden features and planting. Initial planting by the same unit is included. Primary activities: fence construction (except agricultural); garden and streetscape planting; garden design implementation; garden drainage systems installation (except agricultural); garden sprinkler systems installation (except irrigation systems); landscape construction; lawn construction; rockery work.

High risk occupations

Tables A11 to A14 show details about the nature, mechanism and agency of injury for each of the four occupations with especially high claim rates in Queensland:

- bricklayers,
- concreters,
- construction and plumbers assistants and
- structural steel and construction workers.

The Tables indicate that the pattern of injury among the high risk occupations in Queensland is similar to the rest of Australia. The main exception here is the greater prevalence among Queensland structural steel construction workers and bricklayers to being injured due to the agency of scaffolding.

Table A11

Most Common Injury Types, High Risk Occupations, Construction, Queensland and Rest of Australia, 2006-07

	Rest of Australia			
	Construction and plumbers assistants	*Concreters*	*Structural steel construction workers*	*Bricklayers*
Sprains and strains of joints and adjacent muscles	43%	35%	39%	33%
Fractures	12%	9%	11%	13%
Open wound not involving traumatic amputation	12%	7%	9%	14%
Contusion with intact skin surface and crushing injury	7%	8%	9%	5%
Deafness	5%	11%	6%	8%
Disorders of muscle, tendons and other soft tissues	3%	6%	5%	10%
Dorsopathies - disorders of spine and discs	2%	9%	5%	4%
	Queensland			
	Construction and plumbers assistants	*Concreters*	*Structural steel construction workers*	*Bricklayers*
Sprains and strains of joints and adjacent muscles	50%	46%	50%	52%
Fractures	11%	7%	16%	8%
Open wound not involving traumatic amputation	12%	14%	10%	7%
Contusion with intact skin surface and crushing injury	6%	3%	3%	8%
Deafness	1%	1%	1%	0%
Disorders of muscle, tendons and other soft tissues	3%	5%	6%	3%
Dorsopathies - disorders of spine and discs	3%	6%	1%	7%

Source: SWA 2006-07 serious claim data, with one or more weeks absence. Journey claims excluded.
Note: asbestosis claims excluded. Excludes undefined industry sectors.

Table A12

Most Common Mechanism of Injury, High Risk Occupations, Construction, Queensland and Rest of Australia, 2006-07

	Rest of Australia			
	Construction and plumbers assistants	*Concreters*	*Structural steel construction workers*	*Bricklayers*
Muscular stress while lifting, carrying, or putting down objects	17%	22%	22%	20%
Muscular stress while handling objects not lift, carry or put down	15%	16%	13%	13%
Falls on the same level	12%	9%	13%	14%
Falls from a height	10%	5%	9%	9%
Hitting moving objects	4%	4%	2%	3%
Being hit by falling objects	8%	6%	6%	8%
	Queensland			
	Construction and plumbers assistants	*Concreters*	*Structural steel construction workers*	*Bricklayers*
Muscular stress while lifting, carrying, or putting down objects	20%	19%	22%	24%
Muscular stress while handling objects not lift, carry or put down	15%	23%	12%	14%
Falls on the same level	11%	14%	15%	19%
Falls from a height	12%	5%	15%	14%
Hitting moving objects	8%	7%	5%	5%
Being hit by falling objects	6%	3%	10%	5%

Source: SWA 2006-07 serious claim data, with one or more weeks absence. Journey claims excluded.
Note: asbestosis claims excluded. Excludes undefined industry sectors.

Table A13

Most Common Breakdown Agency, High Risk Occupations, Construction, Queensland and Rest of Australia, 2006-07

	Rest of Australia			
	Construction and plumbers assistants	*Concreters*	*Structural steel construction workers*	*Bricklayers*
Ferrous and non-ferrous metal	9%	6%	20%	6%
Bricks and tiles and concrete, cement and clay products, n.e.c	6%	6%	2%	21%
Scaffolding	4%	3%	19%	10%
Traffic and ground surfaces other	5%	6%	6%	7%
Agency not apparent	5%	4%	3%	5%
Sawn or dressed timber	4%	5%	5%	2%
	Queensland			
	Construction and plumbers assistants	*Concreters*	*Structural steel construction workers*	*Bricklayers*
Ferrous and non-ferrous metal	12%	9%	19%	0%
Bricks and tiles and concrete, cement and clay products, n.e.c	4%	2%	1%	27%
Scaffolding	3%	2%	31%	22%
Traffic and ground surfaces other	4%	3%	2%	8%
Agency not apparent	11%	13%	6%	11%
Sawn or dressed timber	5%	7%	6%	0%

Source: SWA 2006-07 serious claim data, with one or more weeks absence. Journey claims excluded.

Note: asbestosis claims excluded. Excludes undefined industry sectors.

Table A14

Most Common Agency of Injury, High Risk Occupations, Construction, Queensland and Rest of Australia, 2006-07

	Rest of Australia			
	Construction and plumbers assistants	*Concreters*	*Structural steel construction workers*	*Bricklayers*
Ferrous and non-ferrous metal	10%	7%	22%	7%
Bricks and tiles and concrete, cement and clay products, n.e.c	6%	8%	3%	22%
Scaffolding	3%	3%	18%	9%
Traffic and ground surfaces other	6%	5%	7%	6%
Sawn or dressed timber	5%	5%	4%	2%
Agency not apparent	5%	3%	3%	5%
	Queensland			
	Construction and plumbers assistants	*Concreters*	*Structural steel construction workers*	*Bricklayers*
Ferrous and non-ferrous metal	11%	7%	18%	1%
Bricks and tiles and concrete, cement and clay products, n.e.c	4%	3%	1%	28%
Scaffolding	3%	2%	29%	20%
Traffic and ground surfaces other	4%	4%	3%	9%
Sawn or dressed timber	4%	6%	5%	0%
Agency not apparent	11%	13%	7%	11%

Source: SWA 2006-07 serious claim data, with one or more weeks absence. Journey claims excluded.

Note: asbestosis claims excluded. Excludes undefined industry sectors.

ATTACHMENT 5

Notified Fatalities

Date	M/F	Age	Worker/ bystander	Industry of workplace	Industry of employer	Nature of injury	Mechanism of injury	Breakdown of injury	Agency of injury	Circumstances
7/7/06	Male	37	Worker	Not applicable **N/A**	Non residential building construction **Construction**	Cranial trauma	Falls from height	N/A	N/A	Involved a commercial construction site and the erection of a steel portal framed shed, size 30m long x 20m wide x 8m high. The deceased was fixing a panel of alsynite sheeting to the roof. He was at a height of 7.83 metres when he fell though the alsynite sheeting, he then rotated in mid air falling on his head to the concrete surface below and suffered fatal injuries. (Matter successfully prosecuted).
17/7/06	Male	51	Worker	Site preparation services **Construction**	Self-employed – Plant hiring **Hospitality, recreation and Other Services**	Crush injuries	Being hit by moving objects	Machinery and (mainly) fixed plant	N/A	A worker sustained fatal head injuries after being struck by the load attached to his crane. The crane was being used in the demolition of a chapel. The operator attached one of the annexes of the chapel to the crane. He exited the crane standing close to the load while others attempted to detach the annex from the main structure. Without warning the load broke away, flipped and struck the crane operator and the chapel owner. (Matter successfully prosecuted).
5/10/06	Male	53	Worker	Non-building construction **Construction**	Non-building construction **Construction**	Crush injuries	Being hit	N/A	Mobile plant and transport	The deceased worker was working in a trench that varied in depth from 1.3m to 0.9m when a bob cat that was bringing sand to the trench suddenly fell into the trench as the ground to the side of the trench gave way. The bobcat fell sideways into the trench that contained newly laid PVC sewerage drainage pipes. The sand that the bobcat was carring was being used as a bedding material for the pipes. The bobcat had minimun area to work in as new town houses had been erected on either side of where the sewerage trenches were being laid and retaining walls had been constructed in the front of the townhouses. The site slopes steeply upward from the street entrance and backfill from the trenches had been placed to the sides of the trenches. The worker in the trench died at the scene as a result of crush injuries to the head and abdominal injuries. The Workplace Health and Safety Investigator on site issued a Prohibition Notice to the Site Manager and a Seizure Reciept was issued to

Date	M/F	Age	Worker/ bystander	Industry of workplace	Industry of employer	Nature of injury	Mechanism of injury	Breakdown of injury	Agency of injury	Circumstances
										the QPS as the bobcat was taken to a holding yard for a mechanical inspection and report. (Matter successfully prosecuted).
2/10/06	Male	43	Worker	Electrical services **Construction**	Electrical services **Construction**	Crush injuries	Being hit		Mobile plant and transport	Worker was hit by pole being lifted from trailer when post disengaged from lifting gear hitting worker causing fatal injuries.
20/11/06	Male	Unknown (early 50's)	Worker	Site preparation services **Construction**	Self-employed **N/A**	Head injuries	Being hit	N/A	Mobile plant and transport	X had driven his backhoe onto his truck, which was parked on an incline, and exited from the cab. The backhoe started to roll back off the truck so X attempted to re-enter the cab. The backhoe kept rolling off the truck and struck X approx 9 metres from the back of the truck. The backhoe then proceeded down the road where it crashed through a fence and struck a house before coming to a stop. Reports indicated that X suffered severe head injuries and later died in hospital
10/01/07	Male	30	Worker	House construction **Construction**	House construction **Construction**	Effects of weather, exposure, air pressure and other external causes	Heat stress	N/A	N/A	Worker collapsed on site – cause of death unable to be verified but from investigation appears to be heat stroke.
18/1/07	Male	36	Worker (self-employed carpenter)	Not applicable (private residence) **N/A**	Carpentry services **Construction**	Head trauma	Falls, trips and slips	N/A	N/A	Construction worker has fallen to his death from the roof of a private residence into the pool below, after striking the side of the pool.
13/9/07	Male	54	Worker	Construction **Construction**	N/A	Internal injury of chest, abdomen and pelvis	Being trapped between stationary and moving objects	Trucks, semi-trailers, lorries	Road transport	Worker working at a private house performing excavation work when the truck became bogged. It was removed with the aid of an excavator and at some time during this process the truck rolled down the hill and the deceased attempted to stop it. In the course of this he was crushed between the truck and the house. Worker died on the way to hospital.
13/9/07	Male	50	Worker	Construction **Construction**	Construction **Construction**	Internal injury of chest,	Overturns	Front end loaders, log handling	Mobile plant and transport	Worker was operating a SAKAI multi tyred road roller and had completed the majority of the task required and was repositioning the roller when it toppled off a

Date	M/F	Age	Worker/ bystander	Industry of workplace	Industry of employer	Nature of injury	Mechanism of injury	Breakdown of injury	Agency of injury	Circumstances
						abdomen and pelvis		plant, other loading plant		batter and flipped onto its side trapping worker's legs.
17/9/07	Male	36	Worker	Construction **Construction**	Construction **Construction**	Internal injury of chest, abdomen and pelvis	Being hit by falling objects	Front end loaders, log handling plant, other loading plant	Mobile plant and transport	On 17 September 2007, a worker sustained fatal injuries when the front end loader he was operating rolled. The MCQ Group Pty Ltd employed the worker as a plant operator. The worker reversed the front end loader over a pile of dirt causing it to destabilise and roll down the slope crushing the worker. The investigation findings presented to the court revealed: the defendant failed to fit a roll-over protective structure to the loader; the defendant failed to provide workers with safe operating instructions and supervision while operating front end loaders. (Matter successfully prosecuted)
23/11/07	Male	58	Worker	Construction **Construction**	Construction **Construction**	Contusion with intact skin surface and crushing injury excluding those with fracture	Being trapped by moving machinery	Excavators, backhoes, other digging plant	Mobile plant and transport	Excavator operator was trying to remove a rock, approx 100 ton in weight, to a lower level. The rock got out of control and the excavator rolled over trapping the operator in the cabin. Attempts to revive the excavator operator once recovered from the cabin that afternoon failed and he died on site. This is the second incident on this site within the last week involving an escavator rollover.
29/11/07	Male	25	Worker	Construction **Construction**	Construction **Construction**	Internal injury of chest, abdomen and pelvis	Being hit by falling objects	Cement mixers	Mobile plant and transport	Worker was holding the line of a concrete pump while standing in a culvert. The boom of the concrete pump appeared to have failed causing fatal crush injuries to worker. Insufficient evidence to prove a breach of the WHS Act.
12/12/07	Male	52	Worker	Construction **Construction**	Construction **Construction**	Multiple injuries	Hitting moving objects	Trucks, semi-trailers, lorries	Mobile plant and transport	A traffic controller was run over by a reversing water truck. Based on inconsistencies in versions of events, lack of an eye witness account, general evidence, not in best public interest to commence action.
25/3/08	N/A	N/A	Bystander	Road and bridge building **Construction**	N/A **N/A**	N/A	Vehicle accident			X was the driver of a truck involved in a fatal motor vehicle accident on the Bruce Highway, Gordonvale. X's vehicle went on to the incorrect side of the road and collided with on-coming traffic. The driver of the other vehicle was killed at the scene. It appears X and the vehicle immediately in front of him, both failed to appreciate the traffic in their direction had

Date	M/F	Age	Worker/ bystander	Industry of workplace	Industry of employer	Nature of injury	Mechanism of injury	Breakdown of injury	Agency of injury	Circumstances
										been stopped until they were too close to be able to brake safely. The vehicle in front veered off the road to the left shoulder of the highway. X told the QPS he feared colliding with this vehicle if he also veered to the left, so he took the risk of there being no on-coming traffic in the other lane and veered onto the wrong side of the road in order to pull up on the right shoulder of the highway. The QPS Vehicle Inspection Officer determined that the vehicle driven by X was "in an unsatisfactory mechanical condition at the time of [his] inspection, due to the insufficient drive axle brake adjustment." Department of Transport investigators determined that the load on vehicle driven by X had not been secured adequately.
21/5/08	Female	36	Worker	Rod and bridge construction **Construction**	Site preparation services **Construction**	Multiple injuries	Being hit by moving object		Road rollers, compactors	Worker has come in contact with moving plant (road roller) after the roller has been hit by a reversing truck. The injuries were fatal.
13/6/08	Male	23	Worker	Non-residential building construction **Construction**	Concreting services **Construction**	Electrocution	Contact with electricity	Cement mixers	Overhead distribution lines: high tension	On the 13th June 2008, at approximately 1600 hrs X was fatality injured when the rubber hose discharge hose came in contact with 33,000 volts electric power line that truncated the corner of the site boundary passing over masonry concrete slab on ground units.
21/6/08	Male	36	Worker	Construction **Construction 5E**	Construction **Construction**	Multiple injuries	Fall from height	Suspended scaffolding	Suspended scaffolding	On Saturday 21 June 2008, two workers fell to their death whilst working on a high rise construction site on the Gold Coast. A suspended (swingstage) scaffold failed and plummeted 26 floors.
21/6/08	Male	53	Worker	Construction **Construction 5E**	Construction **Construction**	Multiple injuries	Fall from height	Suspended scaffolding	Suspended scaffolding	On Saturday 21 June 2008 two workers fell to their death whilst working on a high rise construction site on the Gold Coast. A suspended (swingstage) scaffold failed and plummeted 26 floors.
19/9/08	Male	52	Worker	Road and bridge construction **Construction**	Plant hiring or leasing **Hospitality, Recreation and Other**	Internal injury of chest, abdomen and pelvis	Being hit by moving objects	Mobile Crane	Mobile Crane	As a concrete pile was being hoisted a 140mm diameter pin securing the upper end of the piling frame to the crane's boom tip became disengaged from its swivel mounting when a weld failed on a securing collar ring. This allowed the piling frame to fall to the ground at right angles to the crane tracks

Date	M/F	Age	Worker/ bystander	Industry of workplace	Industry of employer	Nature of injury	Mechanism of injury	Breakdown of injury	Agency of injury	Circumstances
					Services					striking and killing the worker. Investigations revealed that the failure was out of the control of the obligation holder within the jurisdiction.
22/9/08	Male	37	Worker	Non building construction **Construction**	Non building construction **Construction**	Injuries to nerve and spinal cord	Being hit by moving objects		Overhead distribution lines: high tension	Workers where tensioning a power-line conductor using a truck, slings and come-along to get enough lack so the power line conductor could be repositioned on tower 45, when one of slings failed causing power line conductor to spring back hitting two workers. One of the workers sustained minor injuries, whereas the deceased suffered severe spinal injuries, and died as a result of those injuries five days after the incident.
17/11/08	Male	43	Worker	Site preparation services **Construction**	Site preparation services **Construction**	Internal injury of chest, abdomen and pelvis	Being trapped by moving machinery or equipment	N/A	Cabin of truck/semi-trailer	Water truck rolled over causing crushing to driver. Investigations revealed that the deceased drove his truck along the edge of an incline of the excavated house pad. The rear left hand wheel of the truck went over the incline, causing the truck's load to shift. As a result, the truck tipped over onto its roof, causing a fatal injury. It was reasonable on the evidence for the obligation holder in its discharge of its obligations to rely on the expertise and experience of the deceased driver to elect and negotiate the path of travel in the weather conditions prevailing at the material time.
17/11/08	Male	23	Worker	Non-residential building construction **Construction**	Electrical services **Construction**	Electrocution	Contact with electricity	Switchboards and fuse boxes	Switchboards and fuse boxes	Labour hire worker employed by the defendant died at the OneSteel Trading Pty Limited distribution centre at Eagle Farm when four structural U beams (U Beams) being loaded onto a semi-trailer fell on top of him. The investigation found that the chain the crane was using to lift the U Beams became caught, snagging the U Beams and overturning them. The load had not been secured by pins inserted along the truck tray and had they been in place would have prevented the U Beams falling from the truck. Further, the labour hire worker was not properly supervised by the defendant, and was found to have encroached the marked exclusion zone. Enforcement of the exclusion zone had broken down

Date	M/F	Age	Worker/ bystander	Industry of workplace	Industry of employer	Nature of injury	Mechanism of injury	Breakdown of injury	Agency of injury	Circumstances
										over time and while the recently engaged labour hire worker had received some training and was made aware of the zone and the barriers in place marking the exclusion zone, compliance with this control was not maintained. (Matter successfully prosecuted.)
1/12/08	Male	25	Worker	Construction (road and bridge construction) **Construction**	Property and business services **Construction**	Other fracture	Being hit by falling objects	Bridges and civil works under construction or demolition	Bridges and civil works under construction or demolition	Fatal crush injuries were sustained by a worker when a concrete beam fell from a bridge under construction. A temporary walkway had been added to the outside of the bridge to facilitate construction. This walkway was attached to an outer beam which rolled off the head stocks and fell to the ground below, taking the walkway with it. The deceased was crushed between the beam and the ground.
15/1/09	Female	18	Bystander	Road and bridge construction **Construction**	N/A **N/A**	Multiple injuries	Vehicle Incident	Semi-portable Plant (Cement mixers) (224)	Semi-portable Plant (Cement mixers) (224)	Traffic controller had stopped 4 vehicles and it is understood that a concrete pumping truck ran into the rear of the last parked vehicle, fatally injuring 2 females (sisters) (construction work being carried out on an overhead bridge near Maroochy River).
15/1/09	Female	18	Bystander	Road and bridge construction **Construction**	N/A **N/A**	Multiple injuries	Vehicle Incident	Semi-portable Plant (Cement mixers)	Semi-portable Plant (Cement mixers)	Traffic controller had stopped 4 vehicles and it is understood that a concrete pumping truck ran into the rear of the last parked vehicle, fatally injuring 2 females (sisters) (construction work being carried out on an overhead bridge near Maroochy River).
13/3/09	Male	52	Worker	Concreting services **Construction**	Concreting services **Construction**	Multiple injuries	Being trapped by moving machinery or equipment	Cement mixtures	Cement mixtures	Deceased was jack hammering old cement from the inside the bowl of his cement truck. As he was coming out, the bowl started to turn and he was entangled and then crushed between the bowl and the chassis.
26/8/06	Male	46	Worker	Business Management Services **Hospitality, Recreation and Other Services**	Electrical services **Construction**	Electric shock	Heat, radiation	N/A	Powered hand-tools & appliances	A self employed electrician was working alone conducting electrical work for the Centre Management of a Shopping Centre at the time of the incident. It is believed that X received a fatal electric shock when he made contact with a live terminal, housed inside an electrical switch board, which was located at the rear of the shopping plaza. Workplace Health and Safety Queensland in consultation with the Electrical Safety Office attended the scene and commenced an investigation into the matter.

Date	M/F	Age	Worker/ bystander	Industry of workplace	Industry of employer	Nature of injury	Mechanism of injury	Breakdown of injury	Agency of injury	Circumstances
26/9/06	Male	45	Worker	Other education (8440) **Health and Community Services**	Non-residential building construction **Construction**	Crush injuries	Being hit	N/A	Powered tools and equipment	Injured person was participating in a Level II Chainsaw course. While under instruction during felling of the tree, the tree splintered and came back towards injured person. He received severe multiple injuries resulting in death. (Matter succesfully prosecuted.)
4/6/07	Male	56	Worker	Primary education **Health and Community Services**	Concreting services **Construction**	Brain injury	Falls on the same level	Cement mixers	Grates, brackets, frames	Work commenced at or about 5:30 am on Monday 4th June 2007 with 8 persons / workers undertaking work that entailed concreting an undercover walkway. At or about 8:15am, X was waiting for the 3rd load of concrete to arrive and was assisting his workers as being a hook man, lifting the reo in the concreting of the walk way. When the 3rd load arrived the concrete pump was engaged and it was at this point it appears to have had a blockage in the line. X at this point has also stepped in and grabbed the rear end of the rubber (flexible rubber concrete hose line) to push it forward to gain more reach. X has done this the blockage has released causing the rubber flexible concrete pumping hose to whip out of the line hand men's hands and also come in contact with the left hand side of X's face knocking him to the ground. X in his fall has come in contact with the footing plate and nut of the steel column support for the roof structure of the walkway resulting serious head injuries.
3/7/07	Male	25	Worker	Private residence **N/A**	Water tank installation **Construction**	Electric shock	Contact with electricity	Electric garden appliances	Electric garden appliances	Worker received an electric shock while installing a water tank at a private residence.
6/8/08	Male	47	Worker	N/A **N/A**	Painting and decorating services **Construction**	Multiple injuries	Falls from a height	N/A	9999	A painting contractor has fallen 17 floors from a high-rise apartment block to his death. There were no witnesses to the incident. The deceased was found some hours after last known discussions occurred withy fellow workers at the complex, on the ground on the southern side of the building. Injuries sustained were consistent with a fall from height.

Date	M/F	Age	Worker/ bystander	Industry of workplace	Industry of employer	Nature of injury	Mechanism of injury	Breakdown of injury	Agency of injury	Circumstances
13/8/08	Male	27	Worker	Manufacturing **Manufacturing**	Electrical services **Construction**	Effects of weather, exposure, air pressure and other external causes	Drowning /immersion	Compressors, pumps	Compressors, pumps	On 13 August 2008, a worker sustained fatal injuries after being pinned underwater to the floor of a pond at a sand plant. The investigation findings presented to the court alleged the incident occurred while the worker was reconnecting electrical connections to the plant on the pontoon. The pontoon had two pumps attached (one large 2.5 tonne pump, and one smaller pump) that moved water from the pond to a sand washing plant. The new pontoon was positioned by crane and the pumps from an old pontoon were placed on the new pontoon. The pumps were not secured to the pontoon by any means. The sand plant site supervisor requested an existing walkway be fixed to the side of the new pontoon. Inclusion of the walkway was not a feature of the works to be undertaken. The walkway was connected to the new pontoon. The pontoon 'listed' (tilted) causing the unsecured pumps to move and the pontoon to capsize. The deceased and two other workers on the left-hand side of the pontoon were thrown into the water. The deceased worker was located pinned to the floor of the pond by the large pump. (Matter was successfully prosecuted)