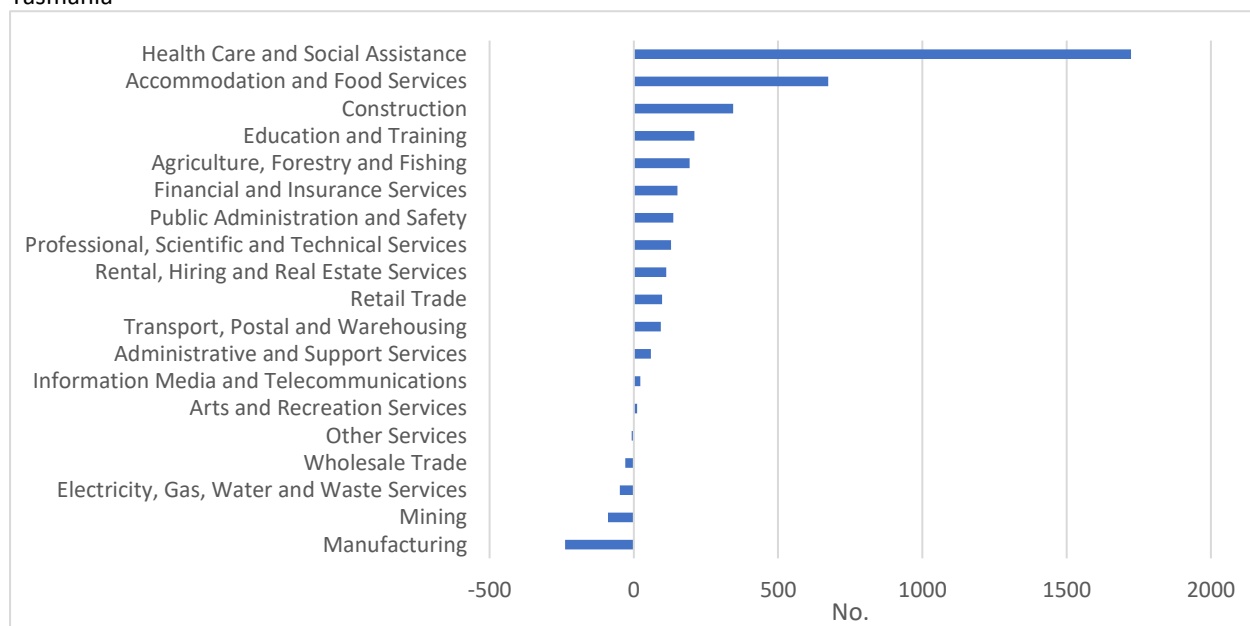


Employment Demand

The Commonwealth Government Department of Employment produces employment projections annually at state and regional level by industry for a five-year horizon¹. These projections are based on historical trends, with some adjustments made to factor in findings of research undertaken by the Department and likely regional developments. The projections do not necessarily factor in government policy intervention or job creation initiatives aimed at contributing to increasing employment demand (e.g., the role of the Coordinator-General in attracting investment, agricultural output targets, irrigation investment, red tape removal, etc.) nor projects such as the University of Tasmania Transformation Project. In addition, the projections are for new jobs only, and do not consider the age profile of the workforce and replacement labour requirements associated with increasing retirements.

The Department of Employment projects that employment in Tasmania will grow by 12,298 by November 2020 with 3,546 new jobs in Launceston and the North East and 1,537 in the North West and West. In Launceston and the North East almost half of these new jobs are projected to occur in the health care and social assistance sector (1,723 new jobs). Other sectors contributing growth include accommodation and food services (674 new jobs), construction (344 new jobs), education and training (210 new jobs) and agriculture, forestry and fishing (193 new jobs).

Figure 1. Projected employment growth by industry sector to November 2020, Launceston and North East, Tasmania

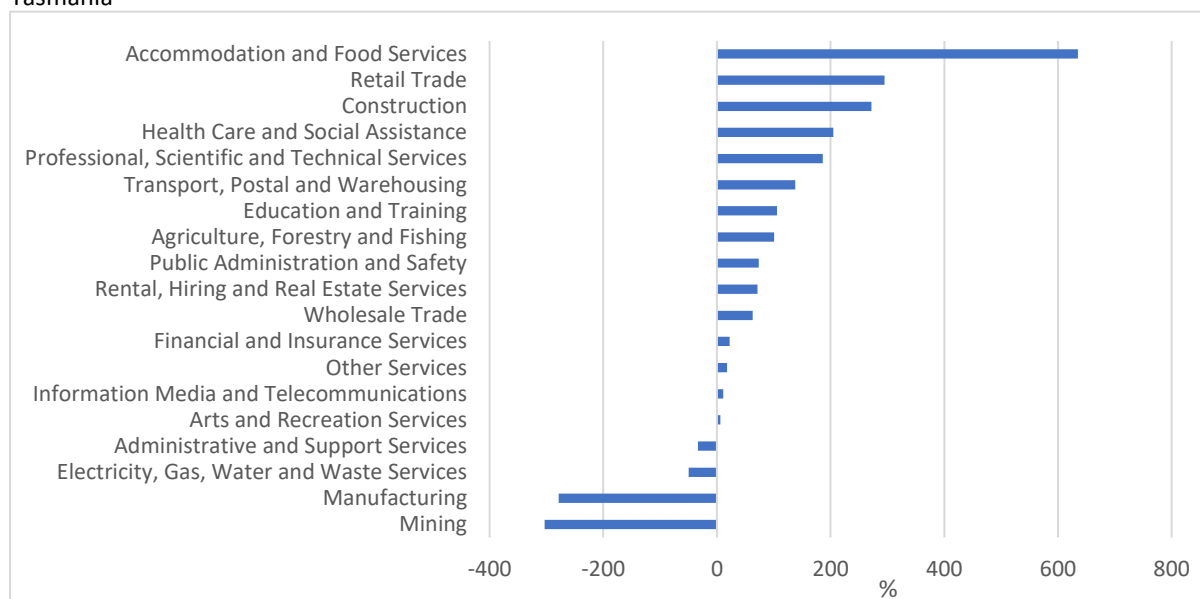


¹ The industry, occupational and regional employment projections are based on detailed data from the Australian Bureau of Statistics Labour Force Survey. The employment projections are derived from best practice time series models that summarise the information that is in a time series and convert it into a forecast. The projections are made by combining forecasts from autoregressive integrated moving average (ARIMA) and exponential smoothing with damped trend (ESWDT) models, with some adjustments made to take account of research undertaken by the Department of Employment and likely future industry, occupational and regional developments. The projection for total employment growth for the 2016 Employment Projections is consistent with the Government's forecasts and projections for total employment growth, as published in the December 2015 Mid-Year Economic and Fiscal Outlook (MYEFO). These projections are for total employment (i.e., both full-time and part-time employment), according to the definition of 'employed' used by the Australian Bureau of Statistics (ABS) in the Labour Force Survey.

Source: Department of Employment, 2016 Employment Projections, Labour Market Information Portal
<http://lmip.gov.au/default.aspx?LMIP/EmploymentProjections>

Employment growth is projected to differ considerably in the North West and West with around 40 per cent of the new jobs are projected to occur in the accommodation and food services sector (635 new jobs). Retail (295 new jobs), construction (272 new jobs), health care and social assistance (205 new jobs) and professional, scientific and technical services (186 new jobs) are also projected to contribute to jobs growth as evident in Figure 2.

Figure 2. Projected employment growth by industry sector to November 2020, North West and West, Tasmania



Source: Department of Employment, 2016 Employment Projections, Labour Market Information Portal
<http://lmip.gov.au/default.aspx?LMIP/EmploymentProjections>

In Tasmania, approximately 44 per cent of the current workforce is aged over 45.² Over the next 15 years around 106,000 Tasmanians will leave the workforce based on the average age of recent retirees of 61.5 years.³ This scenario will create demand for employment, a reversal of the situation of the last four decades. Not only will employment demand increase as a result of the need to replace retiring workers, it will increase to service the needs, and changing consumption patterns, of a larger, older population for at least the next four decades.

From a regional perspective, 50.6 per cent of the current workforce in Launceston and the North East and 46 per cent in the North West and West are aged over 45. Around 33,000 workers in Launceston and the North East and 24,000 in the North West and West are likely to exit the workforce over the next 15 years. Based on a shorter time frame, around 28,000 of those aged 55 and over will exit the workforce over the next five year (17,000 in Launceston and the North East and 11,000 in the North West and West). Many of these people will need to be replaced in the workforce by appropriately educated and skilled workers.

The age profile of workers differs considerably by industry. In the Launceston and North East region, the oldest workforces are in the agriculture, forestry and fishing sector (average age of 46.5 years,

² ABS, Labour Force, Australia, Detailed - Electronic Delivery, Dec 2016, Cat. No 6291.0.55.001

³ ABS, Retirement and Retirement Intentions, Australia, July 2014 to June 2015, Cat. No. 6238.0

the transport, postal and warehousing sector (average age 46.3 years), the health care and social assistance and education and training sectors (both with an average age of 45.0 years). In the instances of the health care and social assistance sector and the education and training sector, both are also in the top four employing sectors in the region (first and fourth respectively) and both are also projected to experience strong growth to 2020 (first and fourth respectively again). This scenario will create considerable demand for appropriately educated and skilled workers from both new job creation and labour replacement perspectives.

Table 1. Age profile of workers by industry sector, Launceston and the North East, Tasmania

	Ave. Age	No. Workers
Agriculture, Forestry and Fishing	46.5	3338
Mining	42.4	562
Manufacturing	40.7	6053
Electricity, Gas, Water and Waste Services	43.7	849
Construction	39.5	4481
Wholesale Trade	41.6	2276
Retail Trade	37.0	6926
Accommodation and Food Services	33.4	4505
Transport, Postal and Warehousing	46.3	2780
Information Media and Telecommunications	40.8	727
Financial and Insurance Services	40.1	1687
Rental, Hiring and Real Estate Services	42.6	774
Professional, Scientific and Technical Services	42.0	2255
Administrative and Support Services	42.4	1591
Public Administration and Safety	43.9	3876
Education and Training	45.0	5446
Health Care and Social Assistance	45.0	7126
Arts and Recreation Services	39.4	880
Other Services	40.8	2236

Source: ABS Census of Population and Housing (2011)

The North West and West shares a similar age profile by industry sector with Launceston and the North East with the oldest four sectors being the same; agriculture, forestry and fishing (average age of 46.3 years), followed by the transport, postal and warehousing sector (average age 45.5 years), the health care and social assistance sector (average age 45.0 years) and the education and training sector (average age of 44.5 years). The top three key growth sectors are both significant employers in the region and relatively young (the accommodation and food services sector has an average age of 35.4 years, the retail sector 36.7 years and construction 39.6 years). The health care and social assistance sector is also projected to contribute considerable employment growth in the region and will also need replacement labour strategies given the age profile of the workforce within the sector.

Table 2. Age profile of workers by industry sector, North West and West, Tasmania

	Ave. Age	No. Workers
Agriculture, Forestry and Fishing	46.3	3259
Mining	41.0	1837
Manufacturing	40.4	5596
Electricity, Gas, Water and Waste Services	44.2	506
Construction	39.6	3509
Wholesale Trade	42.1	1806
Retail Trade	36.7	5263
Accommodation and Food Services	35.4	3188
Transport, Postal and Warehousing	45.5	2470
Information Media and Telecommunications	41.0	322
Financial and Insurance Services	40.0	662
Rental, Hiring and Real Estate Services	43.6	481
Professional, Scientific and Technical Services	43.8	1354
Administrative and Support Services	41.1	1411
Public Administration and Safety	43.7	2742
Education and Training	44.5	3654
Health Care and Social Assistance	45.0	4953
Arts and Recreation Services	41.6	308
Other Services	39.6	1776

Source: ABS Census of Population and Housing (2011)

When considered by occupation, age profiles also differ considerably. The tables (3 and 4) below list the top 80 occupations⁴ in the respective regions and the average age of the workers in that occupation. With the exception of sales assistants in both regions (and Metal Fitters and Machinists in the North West and West), the top 10 occupations have an average age over 42. Most of these occupations now require post-school qualifications.

⁴ The ABS Australia and New Zealand Standard Classification for Occupations (ANZSCO) is used at the 4-digit level. Occupations with less than 50 workers have been removed for the purpose of this analysis.

Table 3. Occupation by number of workers, Launceston and North East, Tasmania

	Occupation	Ave. Age.	No. employed		Occupation	Ave. Age	No. employed
1	Sales Assistants (General)	33.6	3365	41	Chefs	35.5	332
2	Registered Nurses	44.8	1519	42	Advertising, Public Relations and Sales Managers	43.6	321
3	General Clerks	44.4	1437	43	Earthmoving Plant Operators	45.6	309
4	Retail Managers	44.0	1381	44	Secretaries	47.1	308
5	Aged and Disabled Carers	46.2	1140	45	Cafe and Restaurant Managers	41.6	306
6	Truck Drivers	45.8	1138	46	Inquiry Clerks	38.1	297
7	Livestock Farmers	53.1	1071	47	Real Estate Sales Agents	45.8	297
8	Commercial Cleaners	47.9	1016	48	Other Miscellaneous Labourers	44.2	296
9	Primary School Teachers	42.5	897	49	Purchasing and Supply Logistics Clerks	42.2	290
10	Secondary School Teachers	44.2	881	50	Shelf Fillers	30.2	288
11	Receptionists	41.0	845	51	Other Hospitality, Retail and Service Managers	45.7	280
12	Kitchenhands	32.5	709	52	Production Managers	45.7	279
13	Waiters	26.6	706	53	Fast Food Cooks	25.9	262
14	Construction Managers	41.4	694	54	Delivery Drivers	41.0	259
15	Electricians	36.6	685	55	Generalist Medical Practitioners	44.2	258
16	Education Aides	45.6	632	56	Bus and Coach Drivers	55.1	258
17	Office Managers	45.6	621	57	Police	37.4	248
18	Carpenters and Joiners	35.6	615	58	Crop Farmers	49.3	247
19	Checkout Operators and Office Cashiers	27.9	613	59	Forklift Drivers	40.9	246
20	Child Carers	36.3	586	60	Building and Plumbing Labourers	38.1	246
21	Storepersons	38.2	565	61	Pharmacy Sales Assistants	34.4	244
22	Motor Mechanics	38.4	559	62	Painting Trades Workers	41.3	243
23	Sales Representatives	43.4	551	63	Keyboard Operators	42.2	241
24	Structural Steel and Welding Trades Workers	36.2	550	64	Housekeepers	44.6	237
25	Metal Fitters and Machinists	39.9	545	65	Contract, Program and Project Administrators	43.7	234
26	Nursing Support and Personal Care Workers	45.4	541	66	Packers	39.1	231
27	Accountants	40.2	519	67	Crop Farm Workers	41.6	228
28	Bank Workers	38.4	438	68	Security Officers and Guards	44.5	227
29	Bar Attendants and Baristas	30.5	406	69	Chief Executives and Managing Directors	51.0	226
30	Accounting Clerks	44.3	406	70	Drillers, Miners and Shot Firers	40.3	224
31	Bookkeepers	46.8	401	71	Couriers and Postal Deliverers	45.3	220
32	Hairdressers	33.7	385	72	Cafe Workers	31.6	218
33	Cooks	37.0	380	73	Human Resource Professionals	41.3	215
34	Mixed Crop and Livestock Farmers	48.7	370	74	Call or Contact Centre Workers	37.5	210
35	Welfare Support Workers	45.5	369	75	Architectural, Building and Surveying Technicians	42.7	209
36	Livestock Farm Workers	36.7	365	76	Motor Vehicle and Vehicle Parts Salespersons	40.9	209
37	Gardeners	42.3	362	77	Handypersons	51.6	199
38	Engineering Production Workers	41.4	349	78	Personal Assistants	40.6	198
39	University Lecturers and Tutors	45.9	347	79	General Managers	47.5	197
40	Plumbers	38.0	341	80	Retail Supervisors	34.5	197

Source: ABS Census of Population and Housing (2011)

Table 4. Occupation by number of workers, North West and West, Tasmania

	Occupation	Ave. age	No. workers		Occupation	Ave. age	No. workers
1	Sales Assistants (General)	33.9	2445	41	Earthmoving Plant Operators	44.5	261
2	Livestock Farmers	50.7	1111	42	Plumbers	38.5	258
3	Truck Drivers	46.3	1101	43	Production Managers	44.0	252
4	General Clerks	43.7	1053	44	Bookkeepers	48.5	250
5	Retail Managers	44.3	1019	45	Call or Contact Centre Workers	39.8	246
6	Aged and Disabled Carers	45.7	1012	46	Sales Representatives	42.9	234
7	Metal Fitters and Machinists	39.6	949	47	Police	37.5	232
8	Registered Nurses	46.8	896	48	Other Stationary Plant Operators	42.8	231
9	Commercial Cleaners	47.4	831	49	Real Estate Sales Agents	46.1	223
10	Primary School Teachers	42.1	710	50	Mixed Crop and Livestock Farmers	52.4	218
11	Drillers, Miners and Shot Firers	39.9	696	51	Pharmacy Sales Assistants	33.5	218
12	Structural Steel and Welding Trades Workers	34.3	661	52	Purchasing and Supply Logistics Clerks	42.6	214
13	Secondary School Teachers	43.0	655	53	Shelf Fillers	28.1	213
14	Food and Drink Factory Workers	41.5	621	54	Cafe and Restaurant Managers	43.9	203
15	Electricians	37.9	600	55	Bus and Coach Drivers	56.8	202
16	Receptionists	39.5	564	56	Product Quality Controllers	41.9	199
17	Carpenters and Joiners	34.7	558	57	Meat, Poultry and Seafood Process Workers	36.8	199
18	Education Aides	43.3	547	58	Fast Food Cooks	27.2	196
19	Child Carers	36.0	480	59	Gardeners	42.1	190
20	Kitchenhands	34.0	480	60	Chefs	34.5	190
21	Office Managers	44.8	476	61	Bank Workers	38.4	189
22	Motor Mechanics	38.0	466	62	Inquiry Clerks	39.2	178
23	Construction Managers	41.3	465	63	Delivery Drivers	41.0	175
24	Waiters	26.9	443	64	Human Resource Professionals	39.7	175
25	Checkout Operators and Office Cashiers	26.8	426	65	Other Hospitality, Retail and Service Managers	46.6	172
26	Storepersons	40.8	365	66	Painting Trades Workers	43.7	169
27	Packers	38.3	319	67	Other Building and Engineering Technicians	44.6	167
28	Nursing Support and Personal Care Workers	46.0	317	68	Advertising, Public Relations and Sales Managers	43.4	166
29	Crop Farmers	49.2	307	69	Architectural, Building and Surveying Technicians	46.9	164
30	Hairdressers	31.5	307	70	Building and Plumbing Labourers	41.0	163
31	Cooks	38.4	306	71	Generalist Medical Practitioners	44.3	162
32	Livestock Farm Workers	36.3	295	72	Cafe Workers	32.8	160
33	Other Miscellaneous Labourers	40.5	291	73	Agricultural, Forestry and Horticultural Plant Operators	41.5	159
34	Bar Attendants and Baristas	35.7	291	74	Contract, Program and Project Administrators	46.2	157
35	Welfare Support Workers	43.7	280	75	Chief Executives and Managing Directors	48.4	156
36	Forklift Drivers	41.3	274	76	Couriers and Postal Deliverers	45.2	156
37	Accountants	41.5	272	77	Housekeepers	45.7	154
38	Accounting Clerks	42.0	271	78	Garden and Nursery Labourers	42.2	153
39	Crop Farm Workers	39.3	264	79	Handypersons	51.0	152
40	Secretaries	47.1	263	80	Vocational Education Teachers (Aus) / Polytechnic Teachers (NZ)	48.1	150

Source: ABS Census of Population and Housing (2011)

Tables 5 and 6 reorder the same information by the average age for each occupation. Notable occupations which are both ageing and projected to increase in demand over the next five years include accommodation and hospitality managers, health and welfare services managers, farmers, enrolled nurses, nurse managers, midwives, aged and disabled carers, special education teachers, education aides and a range of managers across different professions. All of these occupations require post-school qualifications.

Table 4. Occupation by average age of worker, Launceston and North East, Tasmania

	Occupation	Ave. age	No. workers		Occupation	Ave. age	No. workers
1	Bus and Coach Drivers	55.1	258	41	Finance Managers	46.4	118
2	Farmers and Farm Managers nfd	54.7	79	42	Massage Therapists	46.4	63
3	Other Accommodation and Hospitality Managers	54.3	101	43	Psychologists	46.2	75
4	Livestock Farmers	53.1	1071	44	Aged and Disabled Carers	46.2	1140
5	Automobile Drivers	52.5	170	45	Human Resource Managers	46.0	134
6	Gallery, Library and Museum Technicians	52.3	118	46	Engineering Professionals nfd	46.0	68
7	Other Cleaners	51.7	55	47	Civil Engineering Professionals	46.0	77
8	Handypersons	51.6	199	48	University Lecturers and Tutors	45.9	347
9	Diversional Therapists	51.5	56	49	Real Estate Sales Agents	45.8	297
10	Chief Executives and Managing Directors	51.0	226	50	Truck Drivers	45.8	1138
11	Domestic Cleaners	50.7	131	51	Other Hospitality, Retail and Service Managers	45.7	280
12	Health and Welfare Services Managers	50.6	98	52	Production Managers	45.7	279
13	Visual Arts and Crafts Professionals	49.5	56	53	Corporate Services Managers	45.6	51
14	Importers, Exporters and Wholesalers	49.4	82	54	Earthmoving Plant Operators	45.6	309
15	Crop Farmers	49.3	247	55	Education Aides	45.6	632
16	Ministers of Religion	49.3	115	56	Supply and Distribution Managers	45.6	106
17	Other Clerical and Office Support Workers	49.2	161	57	Office Managers	45.6	621
18	Other Miscellaneous Clerical and Administrative Workers	49.0	74	58	Welfare Support Workers	45.5	369
19	School Principals	49.0	142	59	Management and Organisation Analysts	45.4	106
20	Mixed Crop and Livestock Farmers	48.7	370	60	Nursing Support and Personal Care Workers	45.4	541
21	Laundry Workers	48.3	116	61	Counsellors	45.4	122
22	Enrolled and Mothercraft Nurses	48.2	142	62	Couriers and Postal Deliverers	45.3	220
23	Education Advisers and Reviewers	48.1	50	63	Filing and Registry Clerks	45.3	56
24	Mail Sorters	48.0	61	64	Other Information and Organisation Professionals	45.2	73
25	Practice Managers	47.9	83	65	Land Economists and Valuers	45.2	53
26	Commercial Cleaners	47.9	1016	66	Training and Development Professionals	45.2	94
27	Nurse Managers	47.9	83	67	Science Technicians	44.9	114
28	General Managers	47.5	197	68	Technical Sales Representatives	44.9	119
29	Transport Services Managers	47.3	78	69	Telecommunications Trades Workers	44.9	104
30	Manufacturers	47.2	150	70	Registered Nurses	44.9	1519
31	Managers nfd	47.3	113	71	Greenkeepers	44.8	119
32	Vocational Education Teachers (Aus) / Polytechnic Teachers (NZ)	47.2	193	72	Occupational and Environmental Health Professionals	44.8	114
33	Midwives	47.1	110	73	Inspectors and Regulatory Officers	44.8	185
34	Secretaries	47.1	308	74	Special Education Teachers	44.8	121
35	Bookkeepers	46.8	401	75	Hotel and Motel Managers	44.7	164
36	Models and Sales Demonstrators	46.6	57	76	Housekeepers	44.6	237
37	Other Specialist Managers	46.6	169	77	School Teachers nfd	44.6	137
38	Veterinarians	46.5	50	78	Clothing Trades Workers	44.5	233
39	Other Stationary Plant Operators	46.5	157	79	Finance Managers	44.5	231
40	Clothing Trades Workers	46.4	52	80	Massage Therapists	44.4	229

Source: ABS Census of Population and Housing (2011)

Table 6. Occupation by average age of worker, North West and West, Tasmania

	Occupation	Ave. age	No. workers		Occupation	Ave. age	No. workers
1	Farmers and Farm Managers nfd	58.0	61	41	Bricklayers and Stonemasons	46.3	74
2	Bus and Coach Drivers	56.8	202	42	Contract, Program and Project Administrators	46.2	157
3	Other Accommodation and Hospitality Managers	56.1	69	43	Midwives	46.2	60
4	Ministers of Religion	53.2	90	44	Real Estate Sales Agents	46.1	223
5	Mixed Crop and Livestock Farmers	52.4	218	45	Domestic Cleaners	46.1	65
6	Caretakers	51.9	64	46	Nursing Support and Personal Care Workers	46.0	317
7	Handypersons	51.0	152	47	Massage Therapists	45.9	51
8	Livestock Farmers	50.7	1111	48	Management and Organisation Analysts	45.8	64
9	Enrolled and Mothercraft Nurses	50.3	111	49	Manufacturers	45.8	125
10	Other Miscellaneous Clerical and Administrative Workers	49.6	54	50	Housekeepers	45.7	154
11	Nurse Managers	49.5	67	51	Practice Managers	45.7	55
12	School Principals	49.4	103	52	Aged and Disabled Carers	45.7	1012
13	Crop Farmers	49.2	307	53	Electrical Engineering Draftspersons and Technicians	45.7	53
14	Managers nfd	49.0	97	54	Forestry and Logging Workers	45.5	96
15	University Lecturers and Tutors	49.0	50	55	School Teachers nfd	45.5	65
16	Gallery, Library and Museum Technicians	48.6	74	56	Other Clerical and Office Support Workers	45.3	136
17	Bookkeepers	48.5	250	57	Telecommunications Trades Workers	45.3	61
18	Chief Executives and Managing Directors	48.4	156	58	Human Resource Managers	45.2	85
19	Vocational Education Teachers (Aus) / Polytechnic Teachers (NZ)	48.1	150	59	Couriers and Postal Deliverers	45.2	156
20	Special Education Teachers	48.0	69	60	Solicitors	45.1	66
21	Hotel and Motel Managers	47.8	110	61	Environmental Scientists	45.1	63
22	General Managers	47.7	131	62	Office Managers	44.8	476
23	Counsellors	47.6	79	63	Other Building and Engineering Technicians	44.6	167
24	Supply and Distribution Managers	47.5	86	64	Earthmoving Plant Operators	44.5	261
25	Commercial Cleaners	47.4	831	65	Finance Managers	44.4	87
26	Occupational and Environmental Health Professionals	47.3	103	66	Retail Managers	44.3	1019
27	Secretaries	47.1	263	67	Security Officers and Guards	44.3	138
28	Laundry Workers	47.0	96	68	Generalist Medical Practitioners	44.3	162
29	Sewing Machinists	47.0	56	69	Training and Development Professionals	44.2	58
30	Architectural, Building and Surveying Technicians	46.9	164	70	Welfare, Recreation and Community Arts Workers	44.1	103
31	Health and Welfare Services Managers	46.9	60	71	Production Managers	44.0	252
32	Registered Nurses	46.8	896	72	Cafe and Restaurant Managers	43.9	203
33	Transport Services Managers	46.7	60	73	Transport and Despatch Clerks	43.9	105
34	Other Hospitality, Retail and Service Managers	46.6	172	74	General Clerks	43.7	1053
35	Other Specialist Managers	46.5	144	75	Financial Investment Advisers and Managers	43.7	69
36	Cleaners and Laundry Workers nfd	46.5	119	76	Welfare Support Workers	43.7	280
37	Inspectors and Regulatory Officers	46.4	118	77	Painting Trades Workers	43.7	169
38	Technical Sales Representatives	46.4	94	78	Freight and Furniture Handlers	43.6	119
39	Truck Drivers	46.3	1101	79	Psychologists	43.6	58
40	Greenkeepers	46.3	77	80	Advertising, Public Relations and Sales Managers	43.4	166

Source: ABS Census of Population and Housing (2011)