

# Appendix 2: Data & Analysis on Socio-Economic Context

## Table of Contents

<b>Appendix 2: Data &amp; Analysis on Socio-Economic Context</b> .....	<b>1</b>
1.1 Geographies for Analysis.....	7
1.2 Population Trends.....	17
1.2.1 Population Change 2001-2021.....	17
1.3 Socio-Economic Indexes for Areas (SEIFA) 2016.....	22
1.4 Age profile.....	23
1.4.1 Median Age.....	23
1.4.2 Age Profile.....	25
1.5 Income profile.....	27
1.5.1 Median Individual income.....	27
1.5.2 Median Household income.....	28
1.6 Household composition.....	30
1.7 Need for assistance (disability).....	32
1.8 Cultural diversity.....	34
1.8.1 Indigenous profile.....	34
1.8.2 Country of birth profile.....	36
1.9 Education profile.....	38
1.9.1 Highest year of school completed.....	38
1.9.2 Post-Secondary School Qualifications.....	40
1.10 Industry and Occupational Profile.....	41
1.10.1 Industry of Employment Profile 2021.....	41
1.10.2 Industry of Employment Profile: Absolute % Change 2016-21.....	45
1.10.3 Industry of Employment Profile: Relative % ('market share') Change 2016-21.....	50
1.10.4 Occupational Profile 2021.....	53
1.10.5 Occupational Profile: Absolute % Change 2016-21.....	55
1.10.6 Occupational Profile: Relative ('market share') Change 2016-21.....	59
1.11 Population projections.....	60
1.11.1 Overview.....	60
1.11.2 Population projections 2021-2041.....	61
1.11.3 Age profile projections 2021-2041.....	62
1.11.4 Household type projections 2021-2041.....	68
1.11.5 Implied dwelling projections 2021-2041.....	74
1.12 Migration Trends.....	76
1.12.1 Overview.....	76
1.12.2 Overall migration.....	76
1.12.3 Migration by personal income.....	83
1.12.4 Migration by age.....	96
1.12.5 Migration by industry of employment.....	102
1.12.6 Migration by occupation.....	109
1.13 Journey to work.....	115
1.13.1 Employed residents who live in the five study areas.....	115
1.13.2 People who work in the five study areas.....	116

1.13.3	Commuters into and out of the five study areas.....	118
1.13.4	Commuters into and out of the five study areas by occupation .....	119

## Figures

Figure 0-1: Illawarra Shoalhaven Region LGAs .....	8
Figure 0-2: Wollongong LGA .....	9
Figure 0-3: Shellharbour LGA.....	9
Figure 0-4: Kiama LGA.....	10
Figure 0-5: Shoalhaven LGA .....	10
Figure 0-6: Wollongong SA3 and Dapto – Port Kembla SA3 .....	11
Figure 0-7: Kiama - Shellharbour SA3 .....	11
Figure 0-8: Shoalhaven SA3.....	12
Figure 0-9: North Nowra - Bomaderry SA2 and Nowra SA2 .....	13
Figure 0-9: Wollongong LGA postcodes.....	14
Figure 0-9: Shellharbour LGA postcodes .....	15
Figure 0-9: Kiama LGA postcodes .....	15
Figure 0-9: Shoalhaven LGA postcodes.....	16
Figure 0-10: Proportional change in ERP, 5-year Census periods, 2001-2021 .....	17
Figure 0-11: Average annual change in ERP over 10 years, 2011-2021 .....	18
Figure 0-12: Average annual change in ERP over 5 years, 2016-2021 .....	19
Figure 0-13: Median age of persons in Illawarra Shoalhaven LGAs .....	24
Figure 0-14: Median age of persons in selected small areas Illawarra Shoalhaven.....	24
Figure 0-15: Age profile in Illawarra-Shoalhaven Region.....	25
Figure 0-16: Age profile in Illawarra Shoalhaven Region LGAs.....	26
Figure 0-17: Age profile in selected small areas Illawarra Shoalhaven Region .....	26
Figure 0-18: Median total personal income (\$/week) in Illawarra Shoalhaven LGAs .....	27
Figure 0-19: Median total personal income (\$/week) in selected small areas Illawarra Shoalhaven .....	28
Figure 0-20: Median total household income (\$/week) Illawarra Shoalhaven LGAs.....	29
Figure 0-21: Median total household income (\$/week) in selected small areas Illawarra Shoalhaven .....	29
Figure 0-22: Household and family composition in Illawarra-Shoalhaven region .....	30
Figure 0-23: Household and family composition Illawarra Shoalhaven LGAs .....	31
Figure 0-24: Household and family composition selected small areas Illawarra Shoalhaven .....	31
Figure 0-25: Need for assistance profile in Illawarra-Shoalhaven region.....	32
Figure 0-26: Need for assistance profile Illawarra Shoalhaven LGAs.....	33
Figure 0-27: Need for assistance profile selected small areas Illawarra Shoalhaven.....	33
Figure 0-28: Indigenous profile Illawarra-Shoalhaven region .....	34
Figure 0-29: Indigenous profile Illawarra Shoalhaven LGAs.....	35
Figure 0-30: Indigenous profile selected small areas of Illawarra Shoalhaven .....	35
Figure 0-31: Country of birth profile Illawarra-Shoalhaven region.....	36
Figure 0-32: Country of birth profile Illawarra Shoalhaven LGAs .....	37

Figure 0-33: Country of birth profile selected small areas of Illawarra Shoalhaven .....	37
Figure 0-34: Highest year of school completed (% of residents aged 15+) ISR .....	38
Figure 0-35: Highest year of school completed (% of residents aged 15+) Illawarra Shoalhaven LGAs.....	39
Figure 0-36: Highest year of school completed selected small areas of ISR.....	39
Figure 0-37: Post-Secondary Qualifications (% of residents aged 15+), by region .....	40
Figure 0-38: Post-Secondary Qualifications (% of residents aged 15+), by LGA.....	41
Figure 0-39: Employment by Industry Sector Illawarra-Shoalhaven Region ('top 10') .....	42
Figure 0-40: Employment by Industry Sector Illawarra-Shoalhaven Region ('remaining 9').....	42
Figure 0-41: Employment by Industry Sector Illawarra-Shoalhaven Region LGAs ('top 10') .....	43
Figure 0-42: Employment by Industry Sector ISR LGAs ('remaining 9') .....	44
Figure 0-43: Employment by Industry Sector ISR: absolute % change 2016-21 ('top 10').....	45
Figure 0-44: Employment by Industry Sector ISR: absolute % change 2016-21 ('remaining 9') ..	46
Figure 0-45: Employment by Industry Sector ISR LGAs: absolute % change 2016-21 ('top 10').	47
Figure 0-46: Employment by Industry Sector ISR LGAs: absolute % change 2016-21 ('remaining 9').....	48
Figure 0-47: Employment by Industry Sector ISR: relative change % ('market share') 2016-21 ('top 10') .....	51
Figure 0-48: Employment by Industry Sector ISR: relative change % ('market share') 2016-21 ('remaining 9').....	51
Figure 0-49: Employment by Industry Sector ISR LGAs: relative change % ('market share') 2016-21 ('top 10').....	52
Figure 0-50: Employment by Industry Sector ISR LGAs: relative change % ('market share') 2016-21 ('remaining 9') .....	53
Figure 0-51: Occupation Profile ISR 2021 .....	54
Figure 0-52: Occupation Profile ISR LGAs 2021 .....	55
Figure 0-53: Occupation Profile ISR: absolute % change ISR 2016-21 .....	56
Figure 0-54: Occupation Profile ISR LGAs: absolute % change ISR 2016-21 .....	57
Figure 0-55: Occupation Profile ISR: relative change ('market share') ISR 2016-21 .....	59
Figure 0-56: Occupation Profile ISR LGAs: relative change ('market share') ISR 2016-21.....	60
Figure 0-57: Proportion of projected population change 2021-2041 by age group, 4 LGAs and Illawarra-Shoalhaven City.....	63
Figure 0-58: Projected population growth (#) by age group 2021-2041, Wollongong LGA & Illawarra-Shoalhaven City.....	64
Figure 0-59: % of projected population growth by age group 2021-2041, Wollongong LGA, Illawarra-Shoalhaven City & Regional NSW .....	64
Figure 0-60: Projected population growth (#) by age group 2021-2041, Shellharbour LGA & Illawarra-Shoalhaven City.....	65
Figure 0-61: % of projected population growth by age group 2021-2041, Shellharbour LGA, Illawarra-Shoalhaven City & Regional NSW .....	65
Figure 0-62: Projected population growth (#) by age group 2021-2041, Kiama LGA & Illawarra-Shoalhaven City .....	66
Figure 0-63: % of projected population growth by age group 2021-2041, Kiama LGA, Illawarra-Shoalhaven City & Regional NSW.....	66

Figure 0-64: Projected population growth (#) by age group 2021-2041, Shoalhaven LGA & Illawarra-Shoalhaven City.....	67
Figure 0-65: % of projected population growth by age group 2021-2041, Shoalhaven LGA, Illawarra-Shoalhaven City & Regional NSW .....	67
Figure 0-66: Proportion of projected household change by type 2021-2041 for 4 LGAs, Illawarra-Shoalhaven City and Regional NSW .....	69
Figure 0-67: Projected household growth (#) by type 2021-2041, Wollongong LGA & Illawarra-Shoalhaven City .....	70
Figure 0-68: % of projected household growth by type 2021-2041, Wollongong LGA, Illawarra-Shoalhaven City & Regional NSW .....	70
Figure 0-69: Projected household growth (#) by type 2021-2041, Shellharbour LGA & Illawarra-Shoalhaven City .....	71
Figure 0-70: % of projected household growth by type 2021-2041, Shellharbour LGA, Illawarra-Shoalhaven City & Regional NSW .....	71
Figure 0-71: Projected household growth (#) by type 2021-2041, Kiama LGA & Illawarra-Shoalhaven City .....	72
Figure 0-72: % of projected household growth by type 2021-2041, Kiama LGA, Illawarra-Shoalhaven City & Regional NSW .....	72
Figure 0-73: Projected household growth (#) by type 2021-2041, Shoalhaven LGA & Illawarra-Shoalhaven City .....	73
Figure 0-74: % of projected household growth by type 2021-2041, Shoalhaven LGA, Illawarra-Shoalhaven City & Regional NSW .....	73
Figure 0-75: Implied dwelling projections (#) change 2021-2041 by LGA.....	75
Figure 0-76: Proportion of Illawarra-Shoalhaven City implied dwelling projection 2021-2041 - dwelling share by LGA .....	75
Figure 0-77: Inward, outward, and net migration, Illawarra-Shoalhaven Region, 2016-2021 .....	77
Figure 0-78: Inward, outward, and net migration, Wollongong SA3, 2016-2021 .....	78
Figure 0-79: Inward, outward, and net migration, Dapto – Port Kembla SA3, 2016-2021.....	79
Figure 0-80: Inward, outward, and net migration, Shellharbour LGA, 2016-2021 .....	80
Figure 0-81: Inward, outward, and net migration, Kiama LGA, 2016-2021 .....	81
Figure 0-82: Inward, outward, and net migration, Shoalhaven SA3, 2016-2021 .....	82
Figure 0-83: Inward and outward migration, persons per dollar in income band, by personal income band, Illawarra-Shoalhaven Region, 2016-2021.....	84
Figure 0-84: Inward, outward, and net inward migration, persons, by personal income, Illawarra-Shoalhaven Region, 2016-2021 .....	85
Figure 0-85: Inward and outward migration, persons per dollar in income band, by personal income band, Wollongong SA3, 2016-2021 .....	86
Figure 0-86: Inward, outward, and net inward migration, persons, by personal income, Wollongong SA3, 2016-2021.....	87
Figure 0-87: Inward and outward migration, persons per dollar in income band, by personal income band, Dapto – Port Kembla SA3, 2016-2021 .....	88
Figure 0-88: Inward, outward, and net inward migration, persons, by personal income, Dapto – Port Kembla SA3, 2016-2021 .....	89

Figure 0-89: Inward and outward migration, persons per dollar in income band, by personal income band, Shellharbour LGA, 2016-2021 .....	90
Figure 0-90: Inward, outward, and net inward migration, persons, by personal income, Shellharbour LGA, 2016-2021.....	91
Figure 0-91: Inward and outward migration, persons per dollar in income band, by personal income band, Kiama LGA, 2016-2021 .....	92
Figure 0-92: Inward, outward, and net inward migration, persons, by personal income, Kiama LGA, 2016-2021.....	93
Figure 0-93: Inward and outward migration, persons per dollar in income band, by personal income band, Shoalhaven SA3, 2016-2021 .....	94
Figure 0-94: Inward, outward, and net inward migration, persons, by personal income, Shoalhaven SA3, 2016-2021 .....	95
Figure 0-95: Inward, Outward and Net migration across age groups in the ISR, 2016-2021 .....	96
Figure 0-96: Inward, Outward migration across age groups in the ISR, 2016-2021 .....	97
Figure 0-97: Inward, outward, and net migration, by age, Wollongong SA3, 2016-2021.....	98
Figure 0-98: Inward, outward, and net migration, by age, Dapto – Port Kembla SA3, 2016-2021 .....	99
Figure 0-99: Inward, outward, and net migration, by age, Shellharbour LGA, 2016-2021.....	100
Figure 0-100: Inward, outward, and net migration, by age, Kiama LGA, 2016-2021 .....	101
Figure 0-101: Inward, outward, and net migration, by age, Shoalhaven SA3, 2016-2021 .....	102
Figures 0-102: Inward, outward, and net migration, by industry of employment, Wollongong SA3, 2016-2021 .....	103
Figure 0-103: Inward, outward, and net migration, by industry of employment, Wollongong SA3, 2016-2021 .....	104
Figure 0-104: Inward, outward, and net migration, by industry of employment, Dapto – Port Kembla SA3, 2016-2021 .....	105
Figure 0-105: Inward, outward, and net migration, by industry of employment, Shellharbour LGA, 2016-2021 .....	106
Figure 0-106: Inward, outward, and net migration, by industry of employment, Kiama LGA, 2016-2021.....	107
Figure 0-107: Inward, outward, and net migration, by industry of employment, Shoalhaven SA3, 2016-2021 .....	108
Figures 0-108: Inward, outward, and net migration, by occupation, Wollongong SA3, 2016-2021 .....	110
Figures 0-109: Inward, outward, and net migration, by occupation, Dapto – Port Kembla SA3, 2016-2021 .....	111
Figures 0-110: Inward, outward, and net migration, by occupation, Shellharbour LGA, 2016-2021 .....	112
Figures 0-111: Inward, outward, and net migration, by occupation, Kiama LGA, 2016-2021 ..	113
Figures 0-112: Inward, outward, and net migration, by occupation, Shoalhaven SA3, 2016-2021 .....	114
Figures 0-113: Inward, outward, and net commuters, Illawarra-Shoalhaven Region and individual study areas, 2021 .....	118

Figures 0-114: Inward, outward, and net commuters, by occupation, Illawarra-Shoalhaven Region, 2021 .....	119
Figures 0-115: Inward, outward, and net commuters, by occupation, Wollongong SA3, 2021 .	120
Figures 0-116: Inward, outward, and net commuters, by occupation, Dapto – Port Kembla SA3, 2021 .....	121
Figures 0-117: Inward, outward, and net commuters, by occupation, Shellharbour LGA, 2021	122
Figures 0-118: Inward, outward, and net commuters, by occupation, Kiama LGA, 2021 .....	123
Figures 0-119: Inward, outward, and net commuters, by occupation, Shoalhaven SA3, 2021 ..	124

## Tables

Table 0.1: Change in Estimated Resident Population (ERP) 2001 - 2021 .....	21
Table 0.2: Socio-Economic Indexes for Areas (SEIFA) 2016 (Percentile).....	23
Table 0.3: Industry of Employment, 2016, 2021, and change (number) between 2016 and 2021, by LGA .....	49
Table 0.4: Occupation, 2016, 2021, and change (number) between 2016 and 2021, by LGA.....	58
Table 0.5: Population projections 2021 to 2041 .....	61
Table 0.6: Implied dwelling projections 2021 to 2041 .....	74
Table 0.7: Place of work of employed people who live in in the five study areas (number) .....	115
Table 0.8: Place of work of employed people who live in in the five study areas (percent).....	116
Table 0.9: Usual residence of employed people who work in the five study areas (number) .....	117
Table 0.10: Usual residence of employed people who work in the five study areas (percent) ....	117

## 1.1 Geographies for Analysis

This section provides an analysis of selected demographic data and trends for the Illawarra Shoalhaven Region, and for the four LGAs that make up the Region, compared with the relevant benchmark areas of Rest of NSW (NSW excluding Greater Sydney) and NSW.

A finer geographic analysis is also provided for selected indicators. These areas are generally those most relevant to the housing market and affordability analysis and *Affordable Housing Strategy*, noting the geographies selected also enable a comparison of data from ABS 2021 Census with earlier Census data to provide an understanding of change over time. They include the SA2 and post code scale. Maps for these various geographies are shown in the maps below.

Other geographies have also been used when these align with published data, particularly the housing cost and affordability analysis at **Chapter 6 of the *Background Report***.

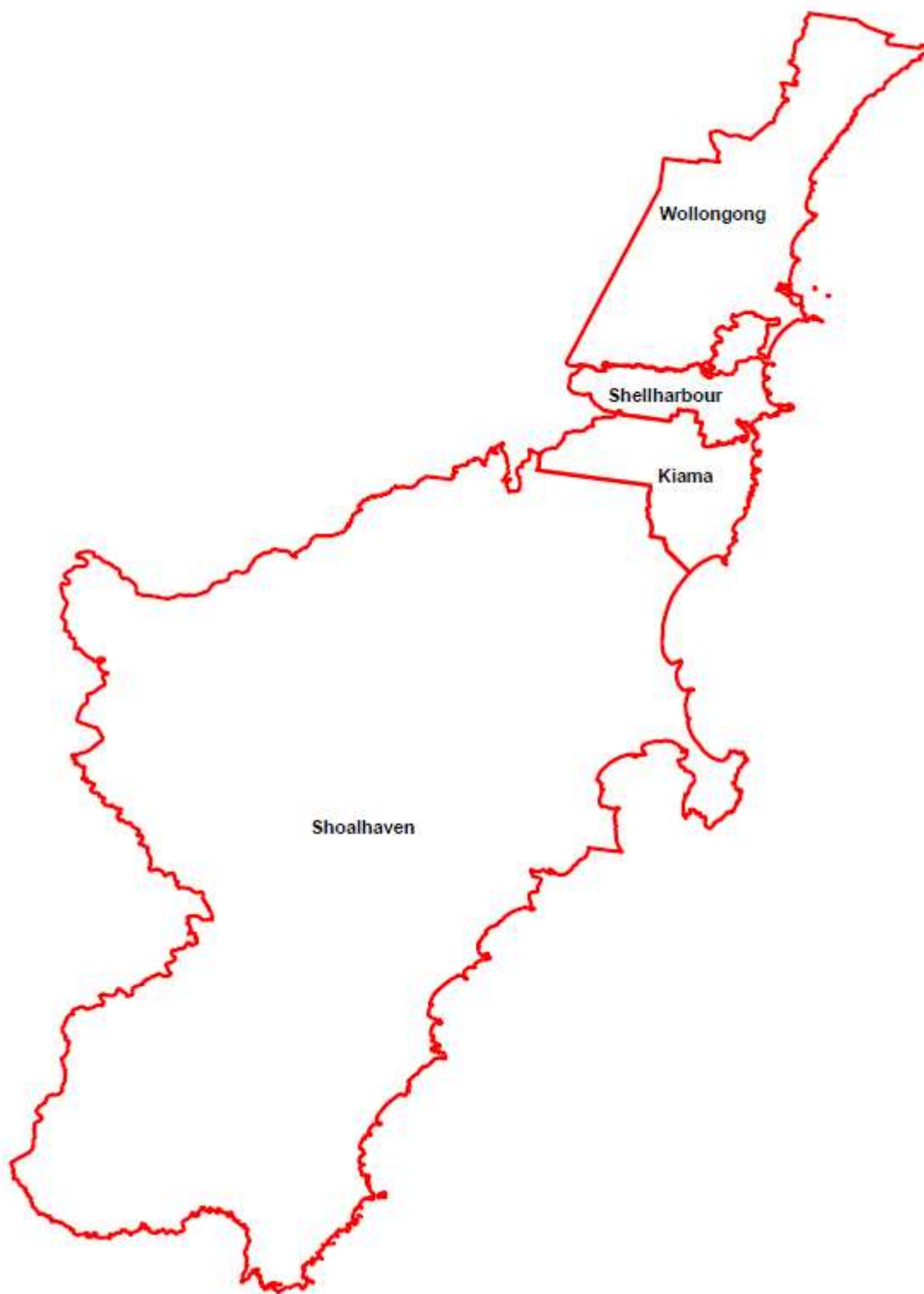


Figure 0-1: Illawarra Shoalhaven Region LGAs

Source: ABS 2016.





Figure 0-2: Wollongong LGA

Source: ABS 2021.



Figure 0-3: Shellharbour LGA

Source: ABS 2021.



Figure 0-4: Kiama LGA

Source: ABS 2021.



Figure 0-5: Shoalhaven LGA

Source: ABS 2021.



Figure 0-6: Wollongong SA3 and Dapto – Port Kembla SA3

Source: ABS 2021.



Figure 0-7: Kiama - Shellharbour SA3

Source: ABS 2021.



Figure 0-8: Shoalhaven SA3

Source: ABS 2021.

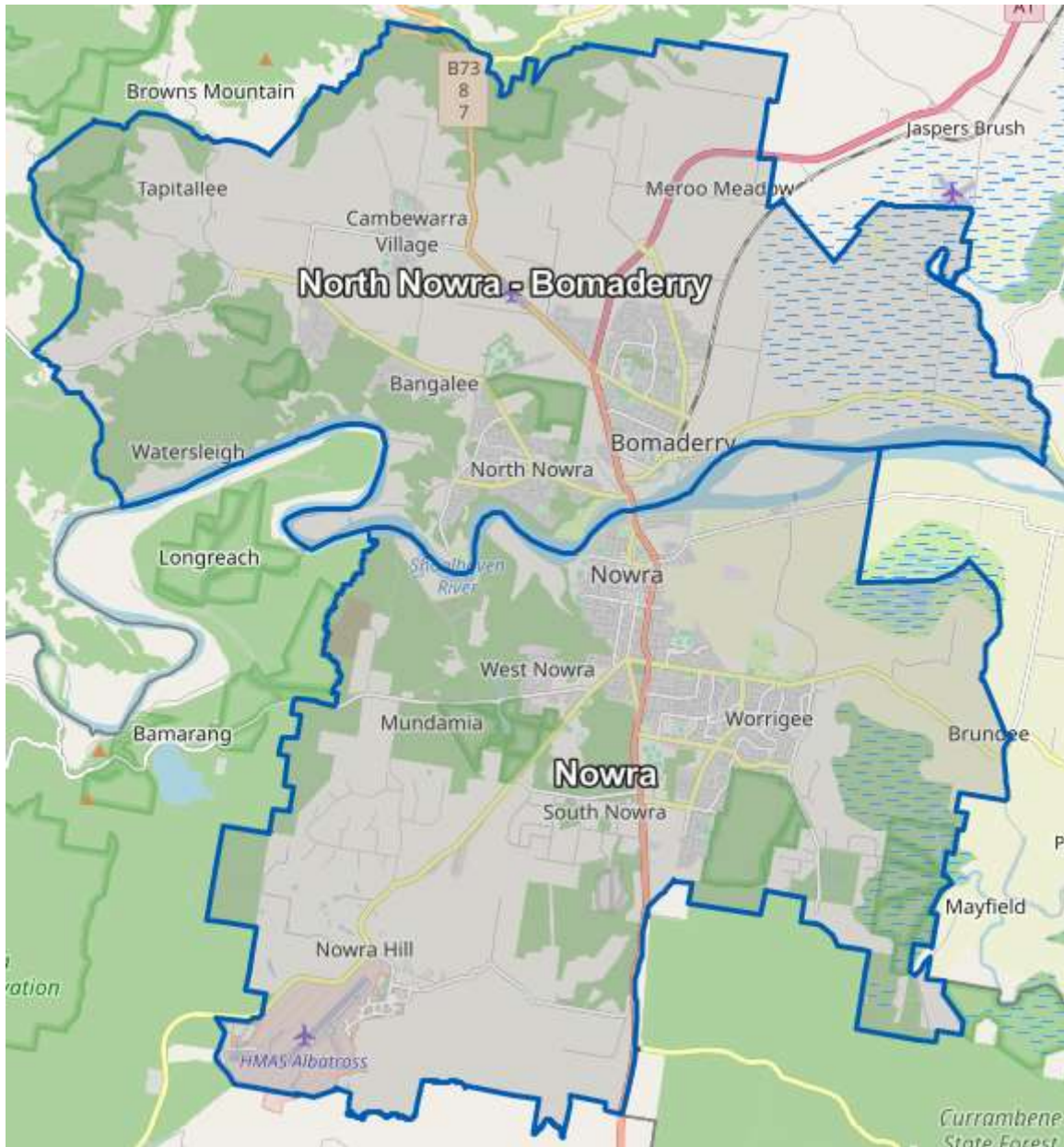


Figure 0-9: North Nowra - Bomaderry SA2 and Nowra SA2

Source: ABS 2021.

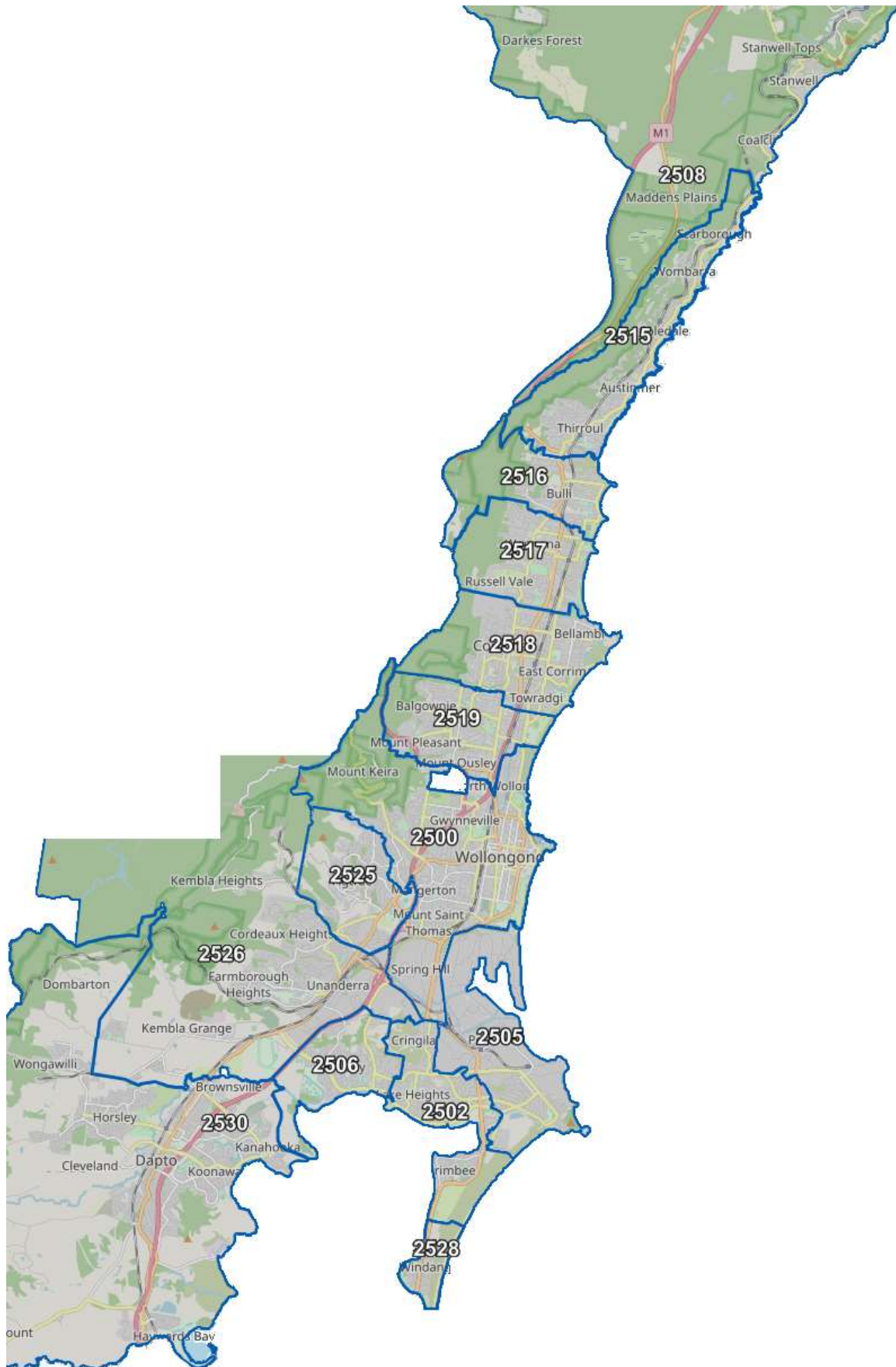


Figure 0-10: Wollongong LGA postcodes

Source: ABS 2021.

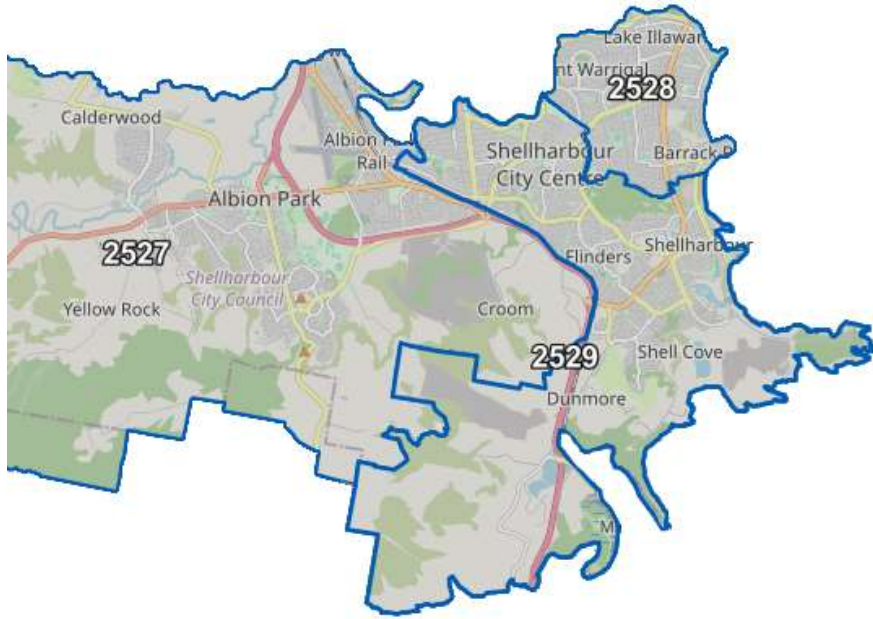


Figure 0-11: Shellharbour LGA postcodes

Source: ABS 2021.

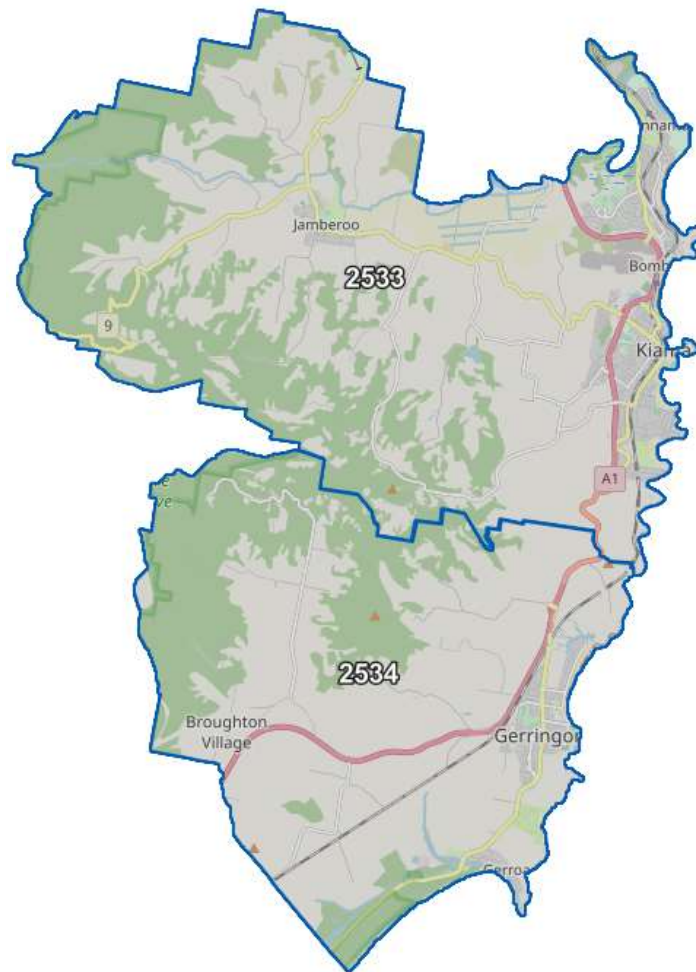


Figure 0-12: Kiama LGA postcodes

Source: ABS 2021.

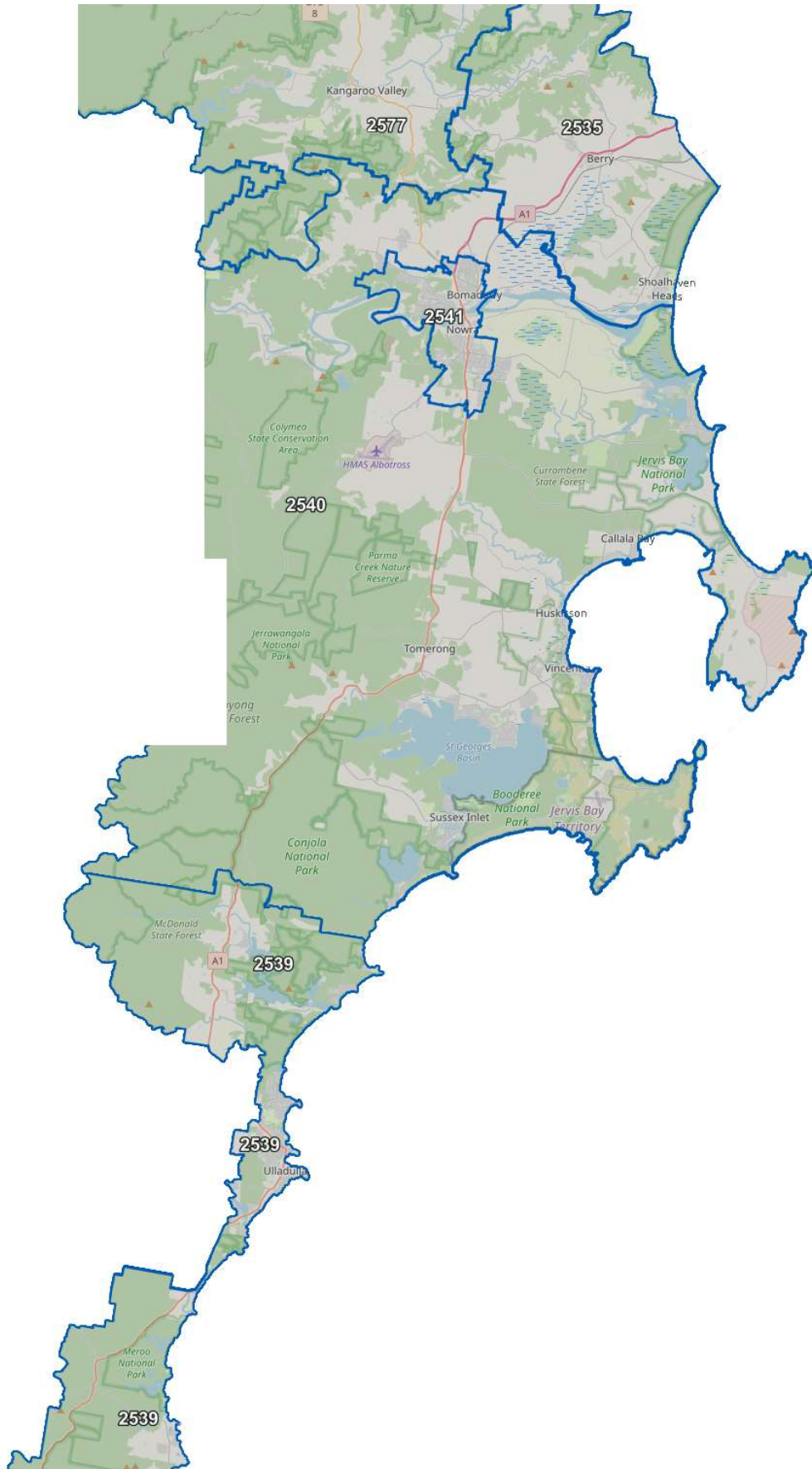


Figure 0-13: Shoalhaven LGA postcodes

Source: ABS 2021.



## 1.2 Population Trends

### 1.2.1 Population Change 2001-2021

The figure below shows the total proportional change in Estimated Resident Population (ERP)<sup>1</sup> for each of the 5-year Census periods over the 20 years from 2001 to 2021. Between 2006 and 2016, Greater Sydney experienced greater proportional growth compared to the Illawarra Shoalhaven LGAs, particularly Wollongong LGA.

From 2016 to 2021, Shellharbour and Shoalhaven LGAs had greater proportional growth than Greater Sydney and NSW; while Wollongong LGA's proportional change was much lower than average at 2% over the period.

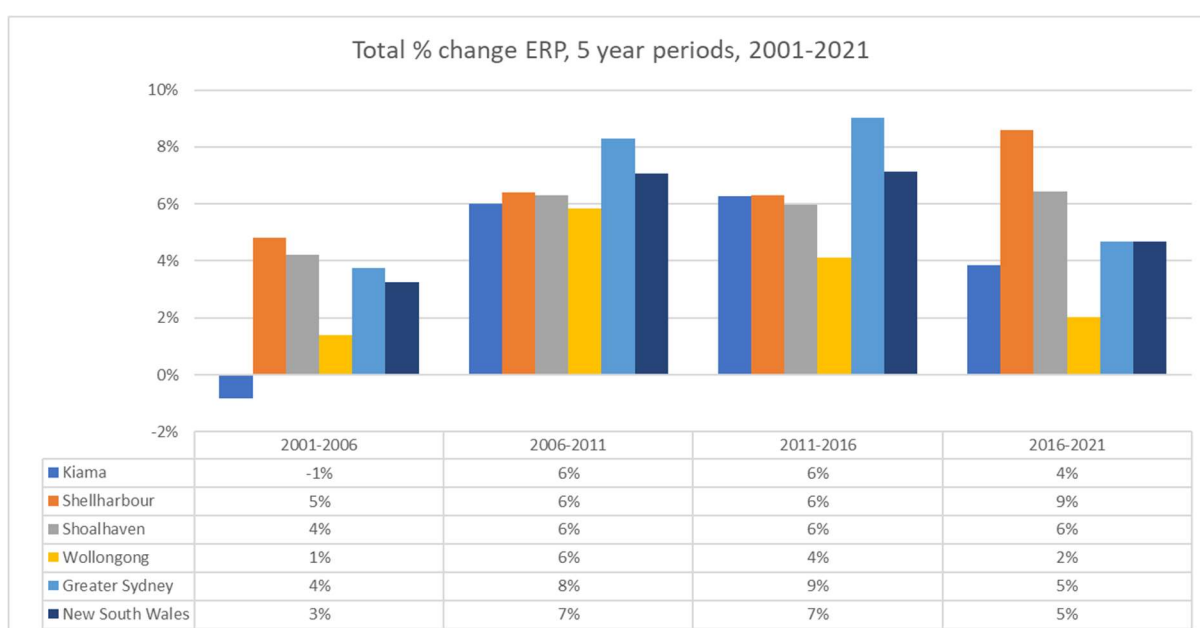


Figure 0-14: Proportional change in ERP, 5-year Census periods, 2001-2021

Source: JSA 2022; ABS 2022, Regional Population 2021

Shellharbour LGA experienced higher than average annual growth over the past decade, whilst Wollongong LGA experienced growth that was much lower than the State average, and Kiama was also below average, as shown below.

<sup>1</sup> Estimated resident population (ERP) is the official estimate of the Australian population, which links people to a place of usual residence within Australia. Usual residence is the address at which a person considers themselves to currently live. ERP includes all people who usually live in Australia (regardless of nationality, citizenship or visa status), with the exception of people present for foreign military, consular or diplomatic reasons.

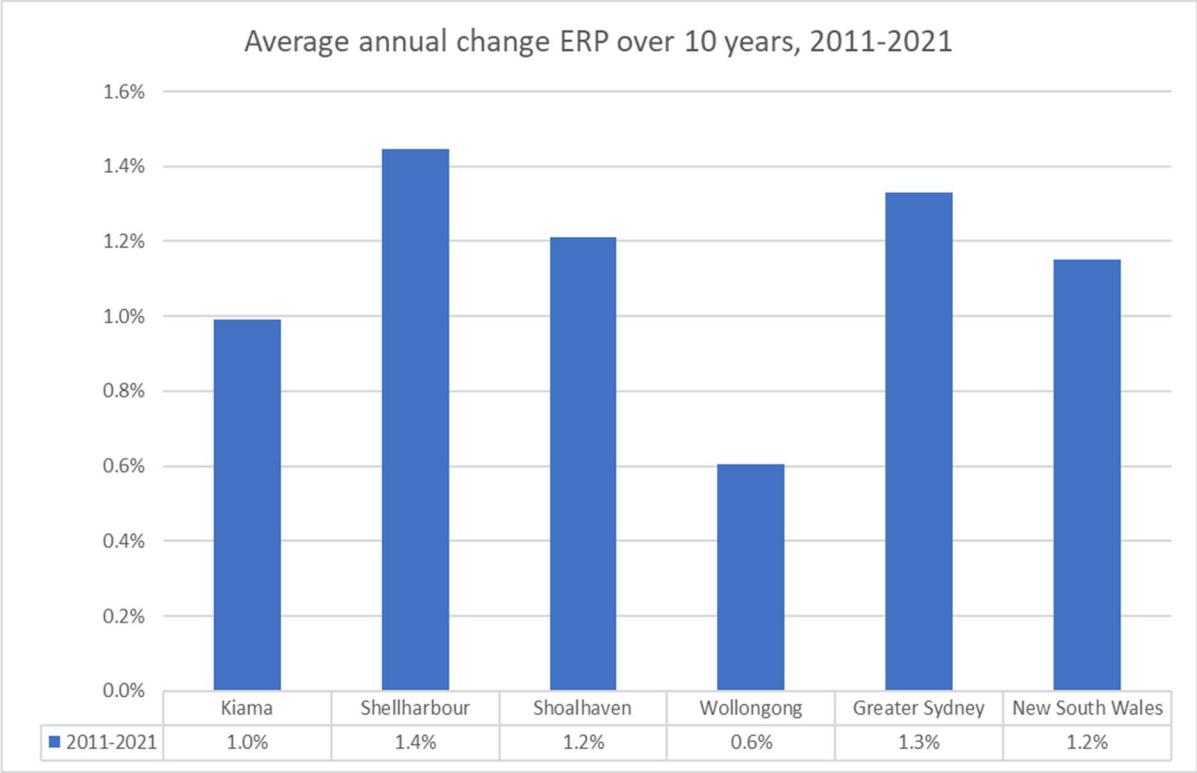


Figure 0-15: Average annual change in ERP over 10 years, 2011-2021

Source: JSA 2022; ABS 2022, Regional Population 2021

Over the five years to 2021, the ERP of Shellharbour and Shoalhaven LGAs experienced much higher than average annual growth rates, whilst Wollongong and Kiama LGAs experienced much lower than average growth, particularly Wollongong LGA (0.4% compared with 0.9% for NSW p.a.).

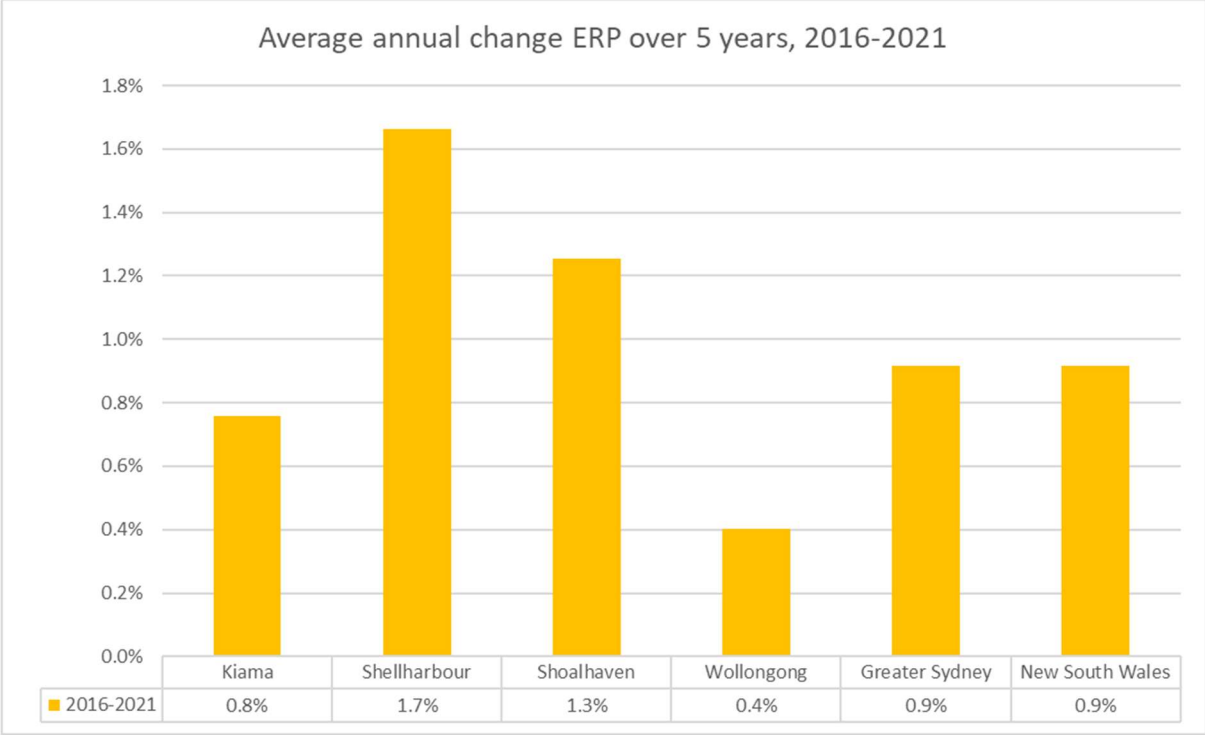


Figure 0-16: Average annual change in ERP over 5 years, 2016-2021

Source: JSA 2022; ABS 2022, Regional Population 2021

These annual growth rates are shown for each LGA and relevant benchmark areas, together with absolute growth in ERP, in the table below.

Over the past two decades (2001-21), the Illawarra Shoalhaven Region grew from around 354,000 to 423,000 residents, total growth of 68,000 people or 19%. Over the same period, Wollongong LGA grew from a city of around 188,000 people to 215,000 residents (51% of the Region’s population), whilst Shoalhaven LGA grew from around 87,000 more than 108,000 people (26% of the Region’s population). Shellharbour is the next largest LGA with 18% of the Region’s population, whilst Kiama now has 5% of the Region’s population.

The Region had relatively low annual growth rates compared with NSW and Greater Sydney from **2011-16**, as did each of the composite LGAs, particularly Wollongong LGA.

From **2016-21**, both NSW and Greater Sydney experienced lower than historical annual growth, likely related to restrictions in immigration during the COVID pandemic, and the Region experienced comparable growth (0.9% each). However, there were major differences between the regional LGAs, with Shellharbour and to a lesser extent Shoalhaven, experiencing much higher

than average annual growth rates from 2016-21 (1.7% and 1.3% respectively), whilst Wollongong LGA very low relative annual growth (0.4%), which pulled down the regional average.

Again, this likely reflects, at least in part, the differential effects of COVID 19 as well as more general housing price differentials and market demand, with in-migration of overseas students and other residents into Wollongong declining during this period, and increased demand for regional areas such as Shellharbour and Shoalhaven, and more constrained housing opportunities in Kiama, including related to the much higher price and lower rate of strata dwellings.

Table 0.1: Change in Estimated Resident Population (ERP) 2001 - 2021

	2001	2006	2011	2016	# change 2011-2016	% change 2011-2016	Average annual change 2011-2016	2021	# change 2016-2021	% change 2016-2021	Average annual change 2016-2021
Kiama LGA	19793	19626	20806	22110	1304	6%	1.2%	22961	851	4%	0.8%
Shellharbour LGA	59383	62243	66218	70391	4173	6%	1.2%	76443	6052	9%	1.7%
Shoalhaven LGA	86856	90505	96203	101942	5739	6%	1.2%	108497	6555	6%	1.3%
Wollongong LGA	188275	190909	202068	210394	8326	4%	0.8%	214657	4263	2%	0.4%
<b>ISR</b>	<b>354307</b>	<b>363283</b>	<b>385295</b>	<b>404837</b>	<b>19542</b>	<b>5%</b>	<b>1.0%</b>	<b>422558</b>	<b>17721</b>	<b>4.4%</b>	<b>0.9%</b>
Greater Sydney	4102580	4256161	4608949	5024923	415974	9%	1.7%	5259764	234841	5%	0.9%
Rest of NSW	2427769	2486529	2609580	2707935	98355	4%	0.7%	2834051	126116	5%	0.9%
New South Wales	6530349	6742690	7218529	7732858	514329	7%	1.4%	8093815	360957	5%	0.9%

Source: JSA 2022; ABS 2022, Regional Population 2021

## 1.3 Socio-Economic Indexes for Areas (SEIFA) 2016

The ABS (2016) Socio-economic Indexes for Areas (SEIFA Indexes) provide an aggregate measure of community disadvantage or wellbeing, based on a weighted index of a range of relevant socio-economic indicators. SEIFA Index of Relative Socio-economic Disadvantage (SEIFA Disadvantage) brings together broad indicators such as low income, education, employment status, disability, etc that have been found to be related to overall disadvantage or community vulnerability, while SEIFA Education and Occupation and SEIFA Economic Resources focuses on indicators specifically related to these domains of community well-being or vulnerability.

SEIFA Indexes were analysed from the ABS 2016 data as the 2021 Census SEIFA Indexes will not be released until late 2023.

In 2016, SEIFA percentile rankings within NSW vary widely between the four LGAs in the Illawarra Shoalhaven, ranging from the Kiama LGA which ranks among the *least* disadvantaged 10% of LGAs in NSW to the Shoalhaven LGA which ranks among the most disadvantaged 40% of LGAs in NSW. At this time, Wollongong and Shellharbour were in the least disadvantaged 66% and 53% of areas respectively.

However, other 2021 Census data analysed for this Background Report indicates that these areas are likely to have gentrified further over the past 5 years, particularly a number of areas within Wollongong and Shellharbour LGA, with rising housing costs and ongoing displacement of less well-off residents.

Percentile rankings for Wollongong and Shellharbour LGAs generally fall amongst the middle 50-70% of LGAs in NSW, apart from the Education and Occupation (IEO) percentile ranking for Shellharbour LGA in the lowest 19% of areas for NSW. The ABS advises that,

“The IEO summarises variables relating to the educational and occupational aspects of relative socio-economic advantage and disadvantage. This index focuses on the skills of the people in an area, both formal qualifications and the skills required to perform different occupations. A low score indicates that an area has a high proportion of people without qualifications, without jobs, and/or with low skilled jobs. A high score indicates many people with high qualifications and/or highly skilled jobs.”<sup>2</sup>

The relatively low ranking of Shellharbour compared with the other two Indexes indicates that this is or has been an area where working people had been able to live and buy a home that do not necessarily have a high level of qualifications or employment status.

The lower ranking of Wollongong as a whole masks the growing social polarisation for the LGA, with areas of very low relative disadvantage, particularly to the north, and areas of severe disadvantage to the south, particularly around the steelworks. For example, the suburb of Warrawong had a SEIFA Disadvantage in the 2<sup>nd</sup> percentile in 2016 (in the **most** disadvantaged 2% of suburbs for Australia) compared with Thirroul, which had SEIFA

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<sup>2</sup> ABS (2016) Socio-Economic Index for Areas: Technical Paper, Pg 7, available online <https://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/2033.0.55.0012016?OpenDocument>.

Disadvantage in the 98<sup>th</sup> percentile in 2016 (in the **least** disadvantaged 2% of suburbs for Australia).

Likewise, Shellharbour LGA has areas of extreme disadvantage, with Warilla in the most disadvantaged 6% of areas for Australia, and areas that are far less disadvantaged, for example, Shell Cove in least disadvantaged 7% of areas for Australia.

Kiama was much more advantaged and socially homogenous. Shoalhaven was also more homogenous, and far more disadvantaged as a whole and by small areas, with Nowra in the most disadvantaged 3% of suburbs for Australia, and areas like Susses Inlet and Ulladulla in the most disadvantaged 13-14% of areas, and areas around Culburra Beach and Georges Basin within the most disadvantaged one quarter to one third of Australian suburbs. Milton and Berry are quite different (in the least disadvantaged 40% and 15% of areas respectively).

This is shown in more detail in the table below, and the maps that follow.

Table 0.2: Socio-Economic Indexes for Areas (SEIFA) 2016 (Percentile)

	<b>IRSD (Disadvantage) (Percentile w/in NSW)</b>	<b>Index of Economic Resources (Percentile w/in NSW)</b>	<b>Index of Education and Occupation (Percentile w/in NSW)</b>
Kiama LGA	90	90	84
Shellharbour LGA	53	71	19
Shoalhaven LGA	46	49	44
Wollongong LGA	66	54	74

Source: JSA 2022, based on data from ABS 2016 Population and Housing Census

## 1.4 Age profile

### 1.4.1 Median Age

Median age was youngest in Wollongong and Shellharbour LGAs, at the time of the 2021 Census, influenced to varying degrees by employment and educational opportunities, size of service centres, the retention of younger people, and the nature of urban growth in these areas, including new release areas that have attracted young families in Shellharbour, and higher density living that is attractive to younger people and professionals in Wollongong LGA.

In contrast, Kiama and Shoalhaven LGAs have long been attractors of people nearing or entering retirement, albeit from differing income and occupational groups, and people seeking lower cost accommodation, particularly from Sydney, in the case of the Shoalhaven.

It is also interesting that Shellharbour and Kiama have aged at a somewhat more rapid rate since 2006, with median aged at that time 37 years in Wollongong LGA, 35 in Shellharbour LGA, 43 in

Kiama LGA, 44 in Shoalhaven LGA compared with 44 for Balance of NSW and 37 for NSW at that time.

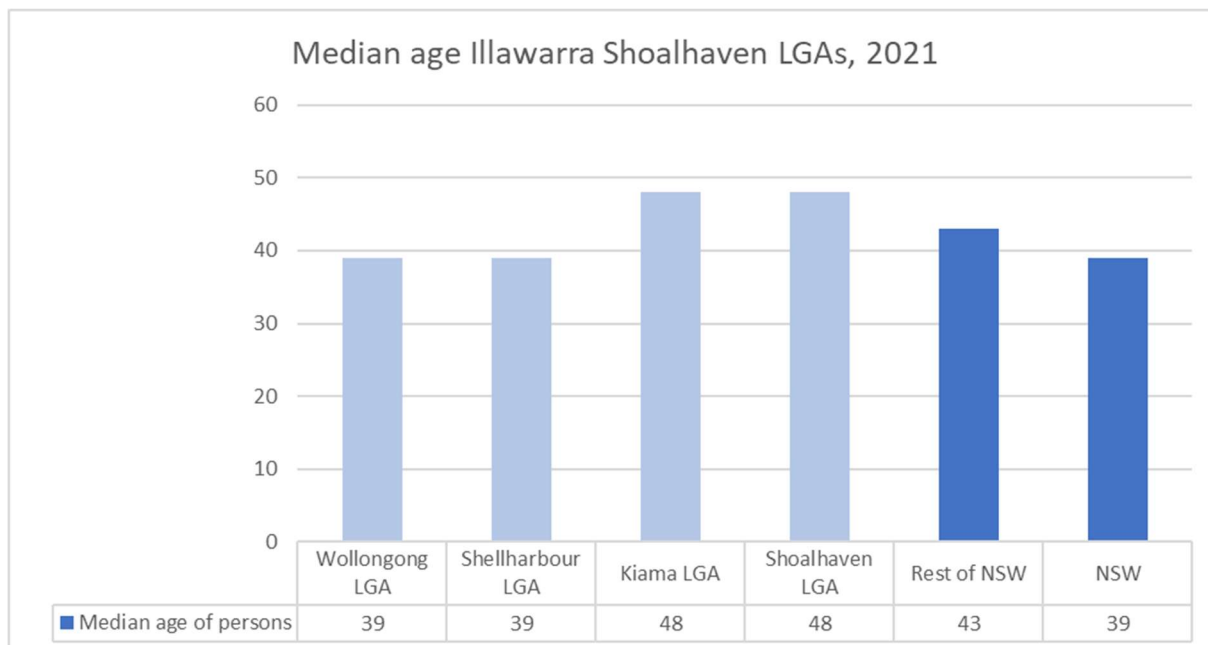


Figure 0-17: Median age of persons in Illawarra Shoalhaven LGAs

Source: ABS 2021, Census of Population and Housing, General Community Profiles

In terms of the selected smaller areas, Nowra SA2 was the only area to have a below average median age, as shown below.

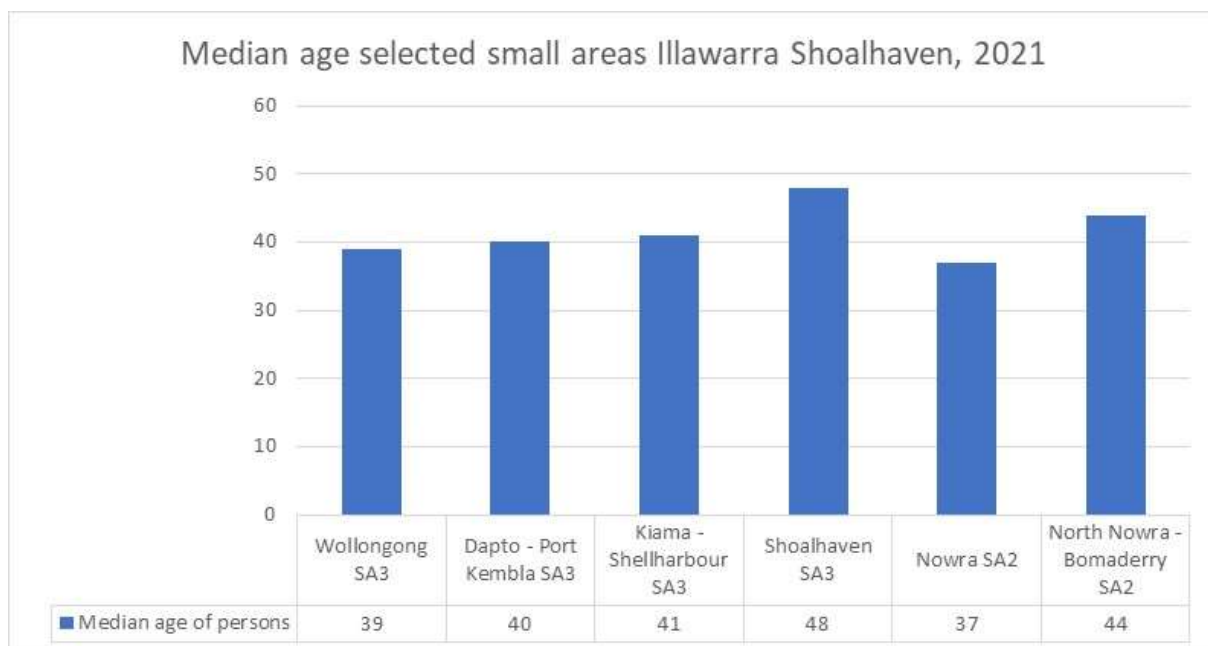


Figure 0-18: Median age of persons in selected small areas Illawarra Shoalhaven

Source: ABS 2021, Census of Population and Housing, General Community Profiles



## 1.4.2 Age Profile

The age profile of the Illawarra Shoalhaven Region as a whole is generally quite similar to that of Rest of NSW, but somewhat different to NSW, which is strongly influenced by Sydney, with a slightly higher rate of people aged more than 55 years of age, and a slightly lower rate of young and middle aged adults 25-54 years old, as shown below.



**Figure 0-19: Age profile in Illawarra-Shoalhaven Region**

Source: ABS 2021, Census of Population and Housing, General Community Profiles

As would be expected from the much higher than average median age, Kiama and Shoalhaven LGAs have a much higher than average rate of people aged 55 years or older, and much lower than average rate of younger adults aged 20-44 years, although with a rate of children and teenagers that is quite similar to the NSW and Rest of Sydney averages.

Wollongong and Shellharbour LGAs is generally quite similar to NSW, with some slight differences related to the former's role as a University city, and the latter as an area that has historically accommodated younger and middle aged families, but is maturing in more recent years, as shown in the figure below.

This is followed by an analysis by selected small areas.

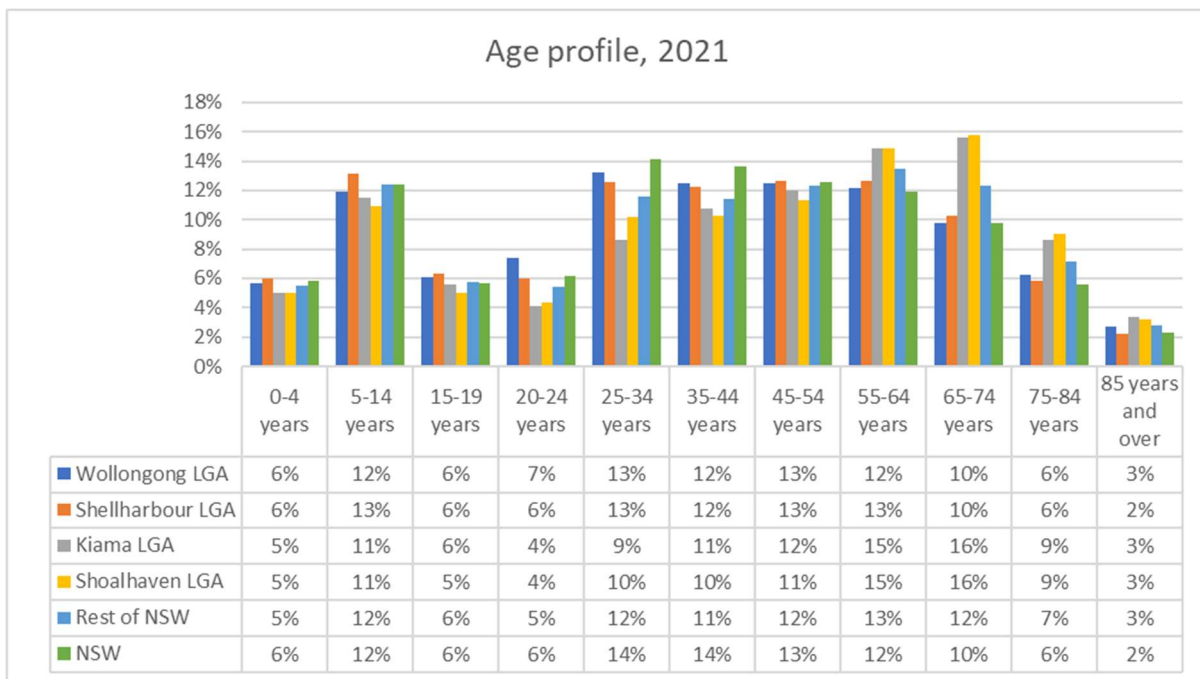


Figure 0-20: Age profile in Illawarra Shoalhaven Region LGAs

Source: ABS 2021, Census of Population and Housing, General Community Profiles

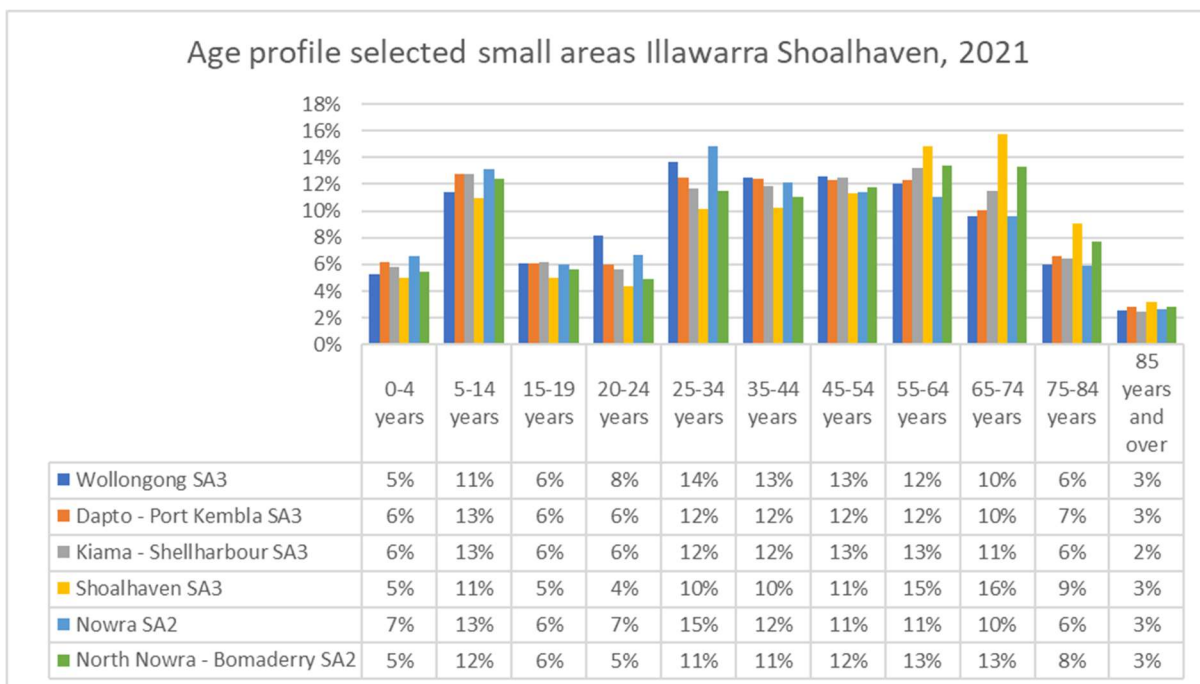


Figure 0-21: Age profile in selected small areas Illawarra Shoalhaven Region

Source: ABS 2021, Census of Population and Housing, General Community Profiles

# 1.5 Income profile

## 1.5.1 Median Individual income

Residents of Kiama LGA has a much higher median individual income than the Rest of NSW average, while Shoalhaven residents have much lower than average individual incomes. Wollongong LGA was above the Rest of NSW median income, but much lower than NSW.

However, Wollongong LGA is highly differentiated, with median individual incomes close to the NSW median in the central-northern areas, and well below average in the southern suburbs, as shown in the two graphs below.

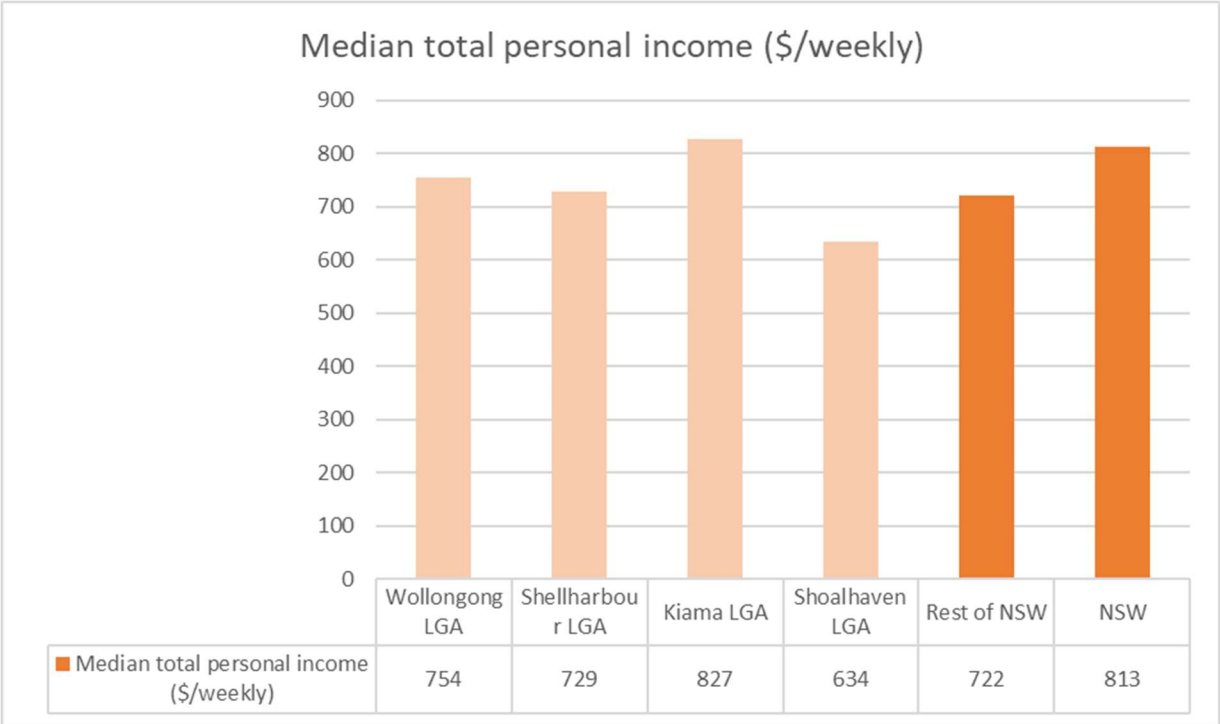


Figure 0-22: Median total personal income (\$/week) in Illawarra Shoalhaven LGAs

Source: ABS 2021, Census of Population and Housing, General Community Profiles

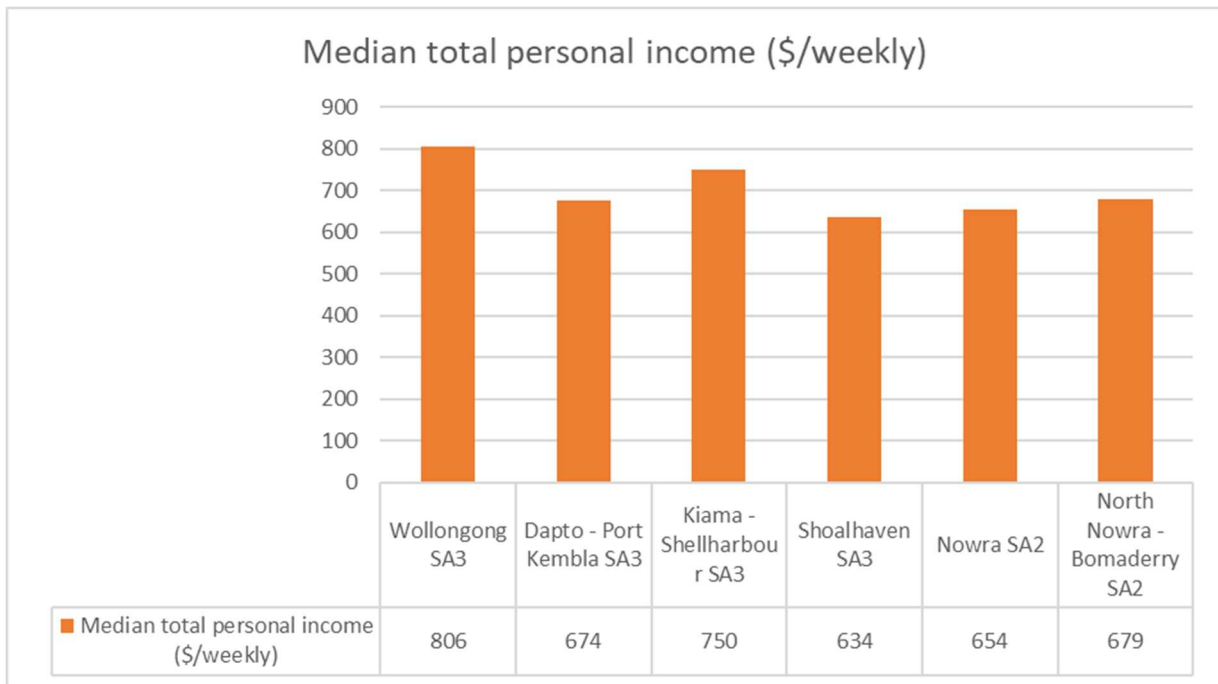


Figure 0-23: Median total personal income (\$/week) in selected small areas Illawarra Shoalhaven

Source: ABS 2021, Census of Population and Housing, General Community Profiles

### 1.5.2 Median Household income

Similarly, Kiama LGA has a much higher median household income than the Rest of NSW average, and just above the NSW median, while Shoalhaven households have much lower than average incomes. Wollongong LGA and Shellharbour LGAs were roughly half way between the Rest of NSW and NSW values.

Again, there was a high level of differentiation between the central-northern suburbs of Wollongong LGA and those to the south, although even the former areas did not reach the NSW median in 2021, as shown in the two graphs below.

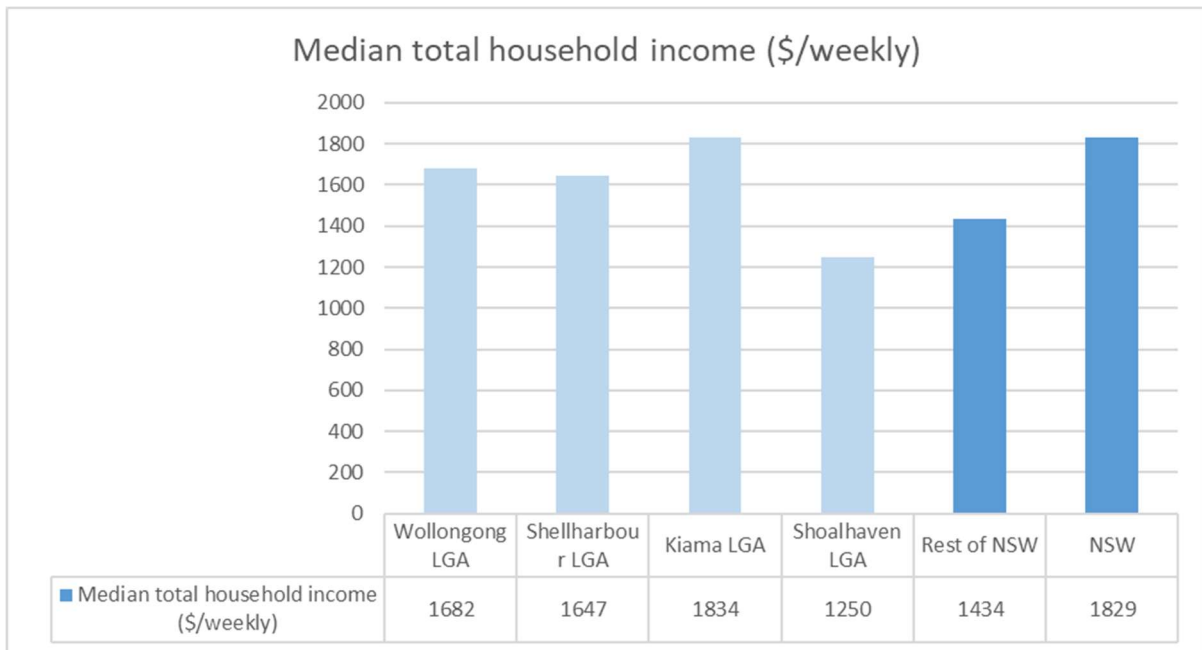


Figure 0-24: Median total household income (\$/week) Illawarra Shoalhaven LGAs

Source: ABS 2021, Census of Population and Housing, General Community Profiles

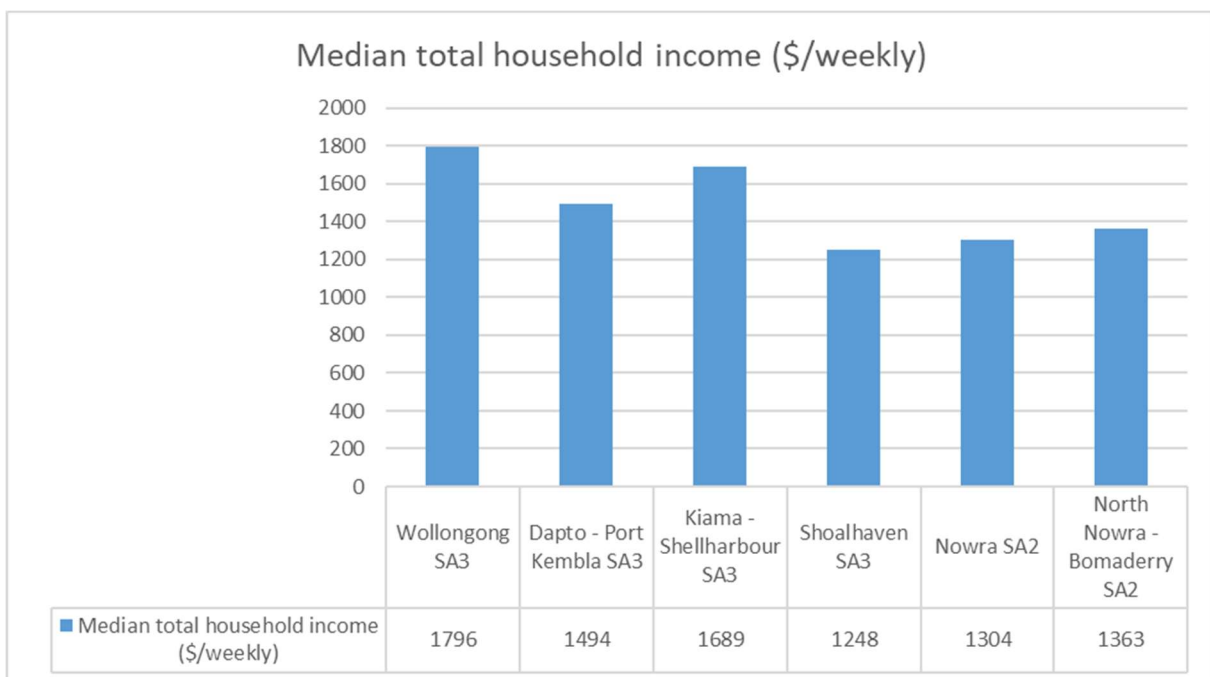
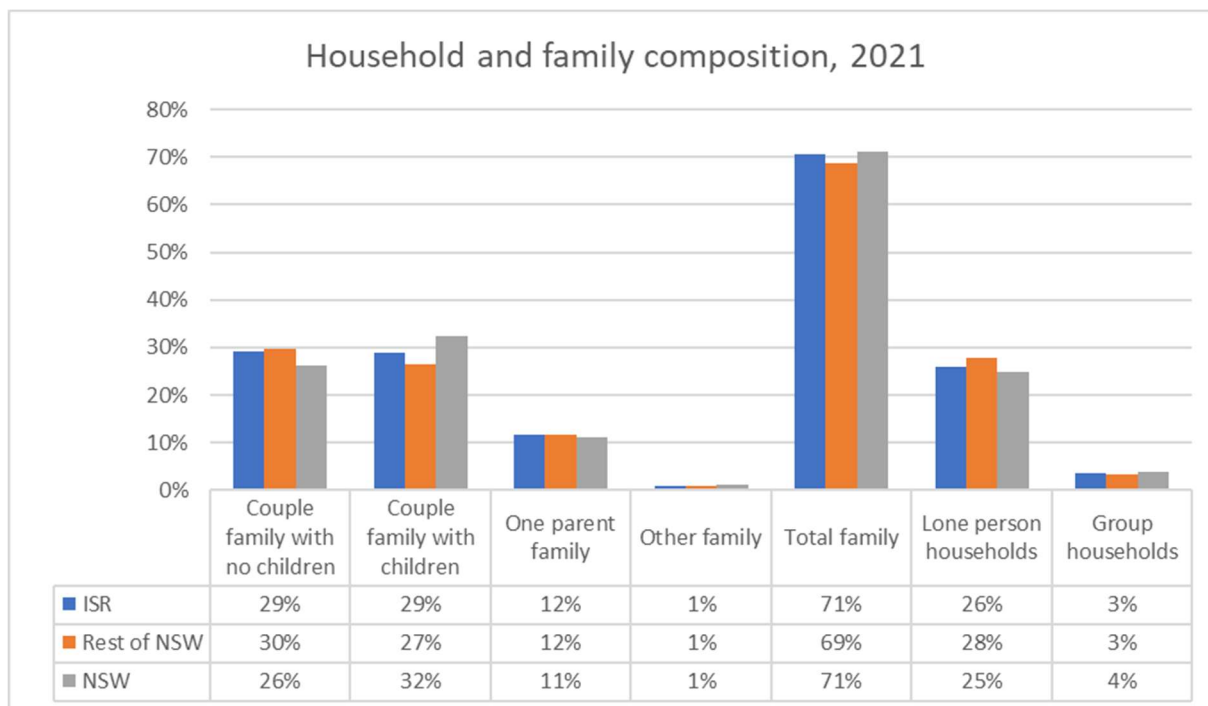


Figure 0-25: Median total household income (\$/week) in selected small areas Illawarra Shoalhaven

Source: ABS 2021, Census of Population and Housing, General Community Profiles

## 1.6 Household composition

In the Region as a whole, there are somewhat more family with children households, and somewhat less couple only and lone person households than the Rest of NSW average, although the regional rate of families with children is lower than NSW, whilst there is a higher than average rate of smaller (lone person and couple only) households.

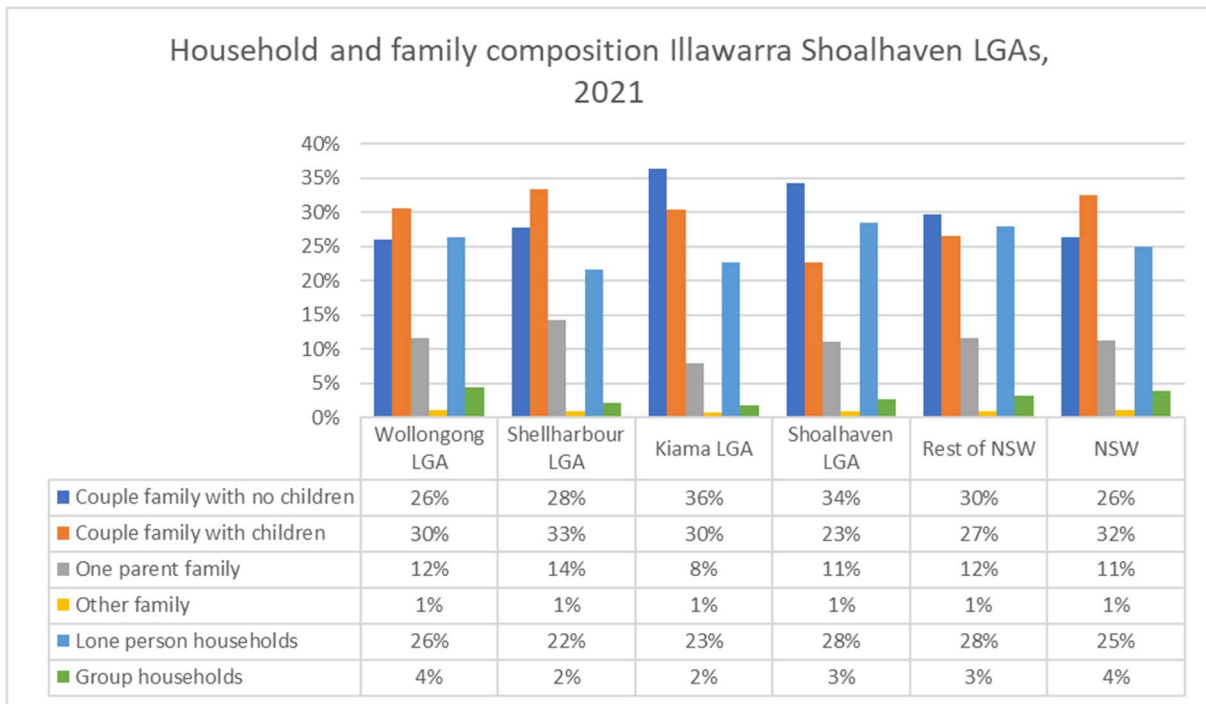


**Figure 0-26: Household and family composition in Illawarra-Shoalhaven region**

Source: ABS 2021, Census of Population and Housing, General Community Profiles

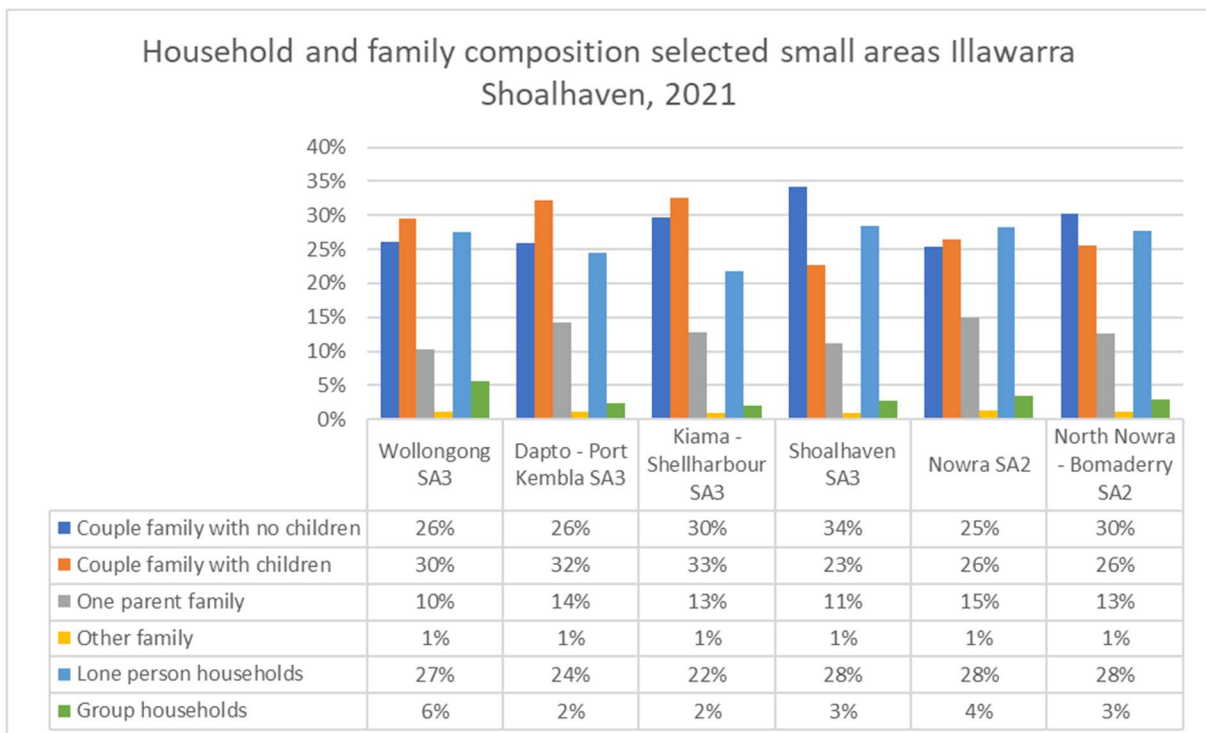
As would be expected from the much older than average age profile, there was a particularly high rate of couple only households in Kiama and Shoalhaven LGAs, although the rate of lone person households was similar to the Rest of NSW average; whereas couple with children households were higher than average in Wollongong, Kiama and particularly Shellharbour LGAs, with the latter also having a higher than average rate of sole parent families compared with Rest of NSW.

In terms of small areas, again Wollongong was quite differentiated geographically in a few respects, with a much higher than average rate of group households in the central-north of the LGA and a much higher than average rate of sole parents in the southern suburbs of Wollongong, as well as in Nowra SA2.



**Figure 0-27: Household and family composition Illawarra Shoalhaven LGAs**

Source: ABS 2021, Census of Population and Housing, General Community Profiles



**Figure 0-28: Household and family composition selected small areas Illawarra Shoalhaven**

Source: ABS 2021, Census of Population and Housing, General Community Profiles

# 1.7 Need for assistance (disability)

The rate of severe disability against this indicator was average at the regional scale, but higher than average in Shoalhaven LGA, due both to the old age and higher level of disadvantage in that area, noting in this regard that Kiama LGA has a similar age profile but a lower than average rate of need for assistance with daily activities.

The inter-relationship between severe disability and disadvantage can also be seen at the smaller scales, with relatively high rates of severe disability in Nowra and North Nowra-Bomaderry SA2s, and in Dapto-Port Kembla SA3, as shown in the three graphs below.

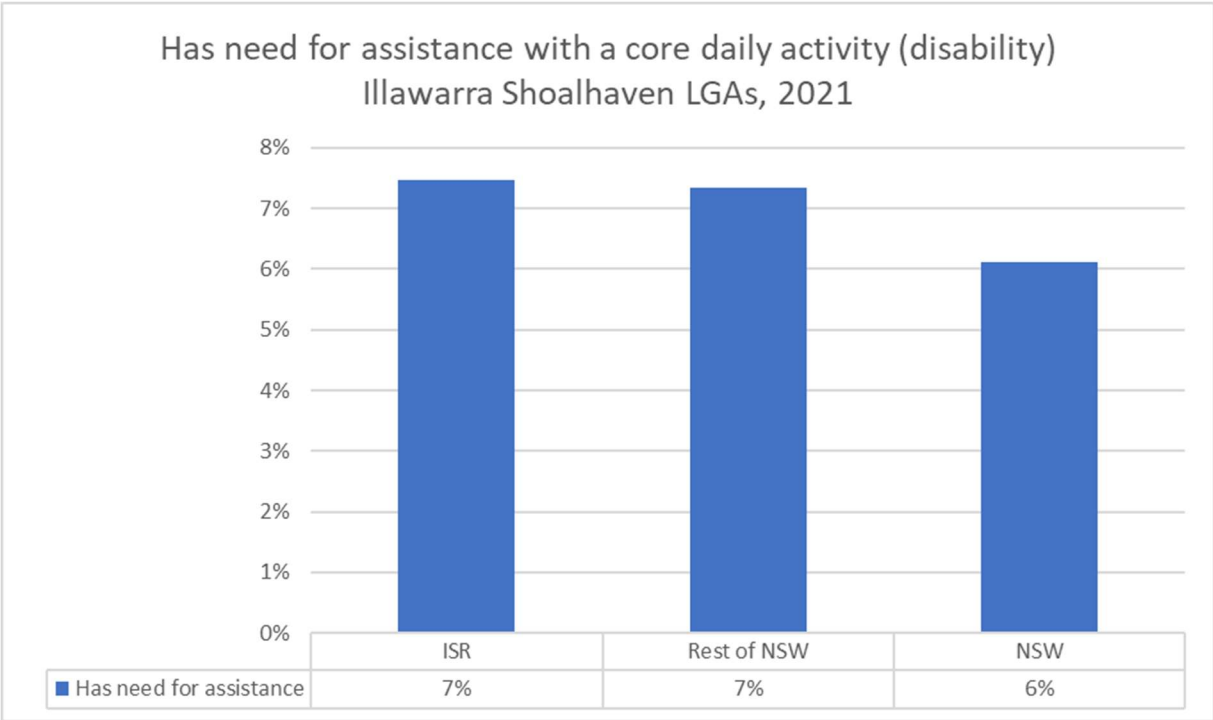


Figure 0-29: Need for assistance profile in Illawarra-Shoalhaven region

Source: ABS 2021, Census of Population and Housing, General Community Profiles, excludes not stated responses.



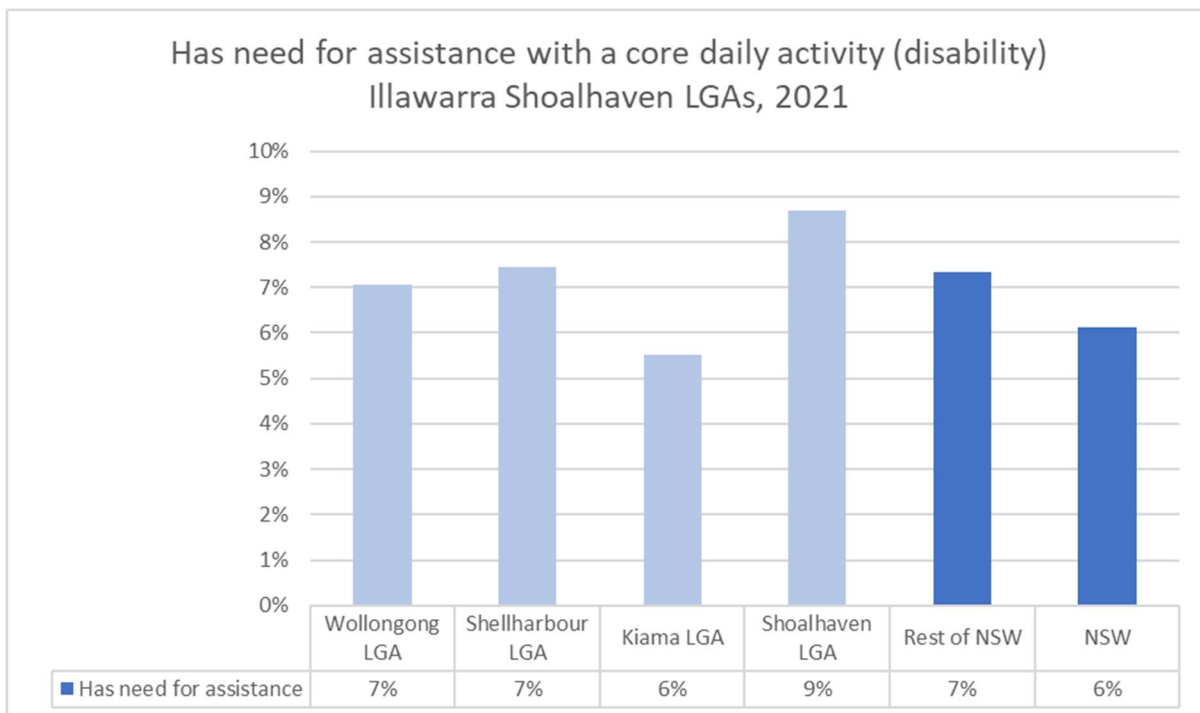


Figure 0-30: Need for assistance profile Illawarra Shoalhaven LGAs

Source: ABS 2021, Census of Population and Housing, General Community Profiles, excludes not stated responses.

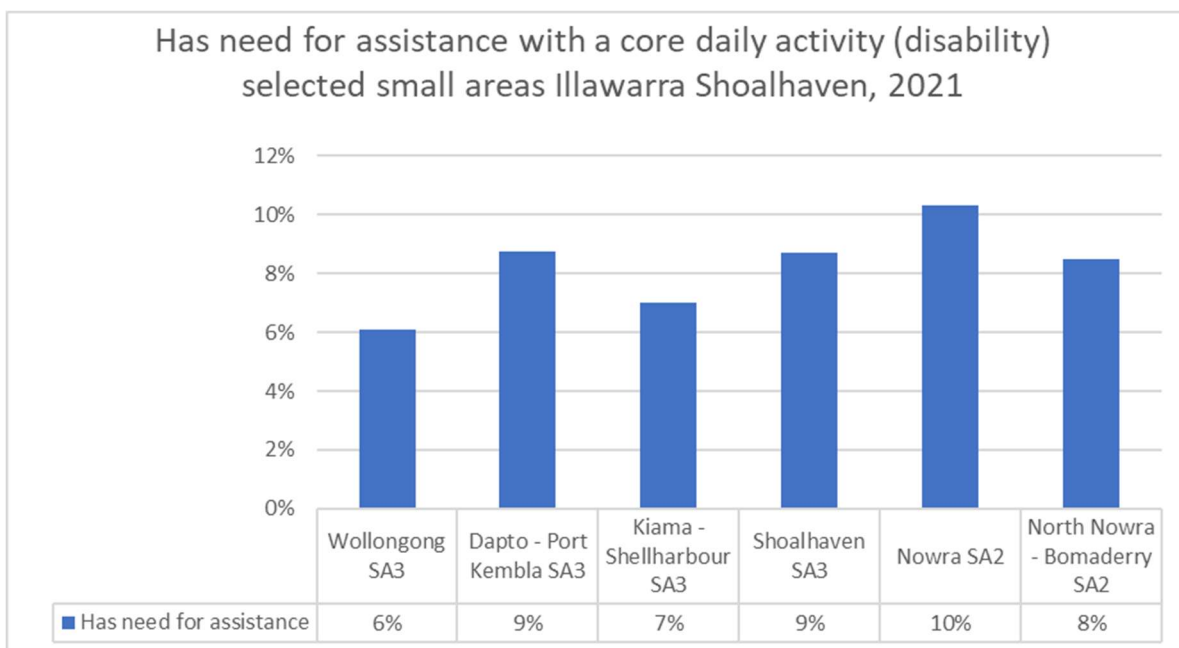


Figure 0-31: Need for assistance profile selected small areas Illawarra Shoalhaven

Source: ABS 2021, Census of Population and Housing, General Community Profiles

# 1.8 Cultural diversity

## 1.8.1 Indigenous profile

The Illawarra Shoalhaven Region has a lower than average rate of people who identify as Aboriginal and Torres Strait Islanders, with the Shoalhaven the only one of the four LGAs that was at the Rest of NSW average (7%).

However, Nowra SA2 had a well above average rate of people who identify as Aboriginal and Torres Strait Islanders (12%), which is likely influenced by the large social housing estate in East Nowra.

This is shown in the three graphs that follow.

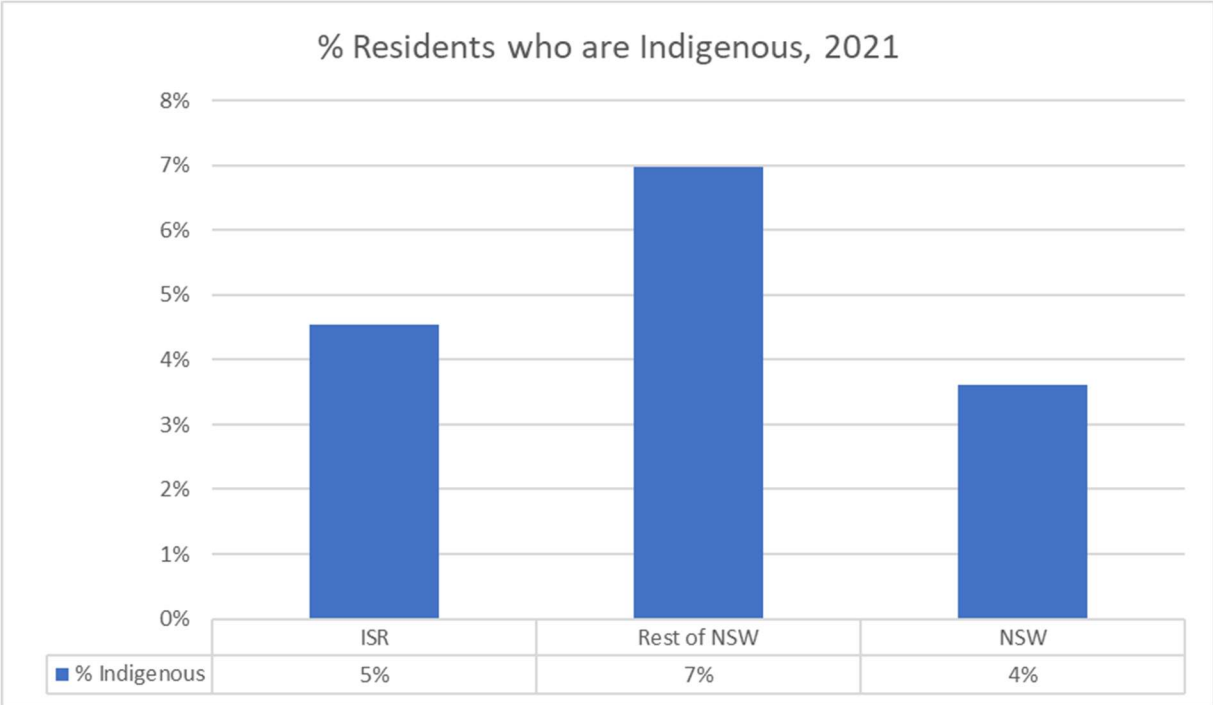
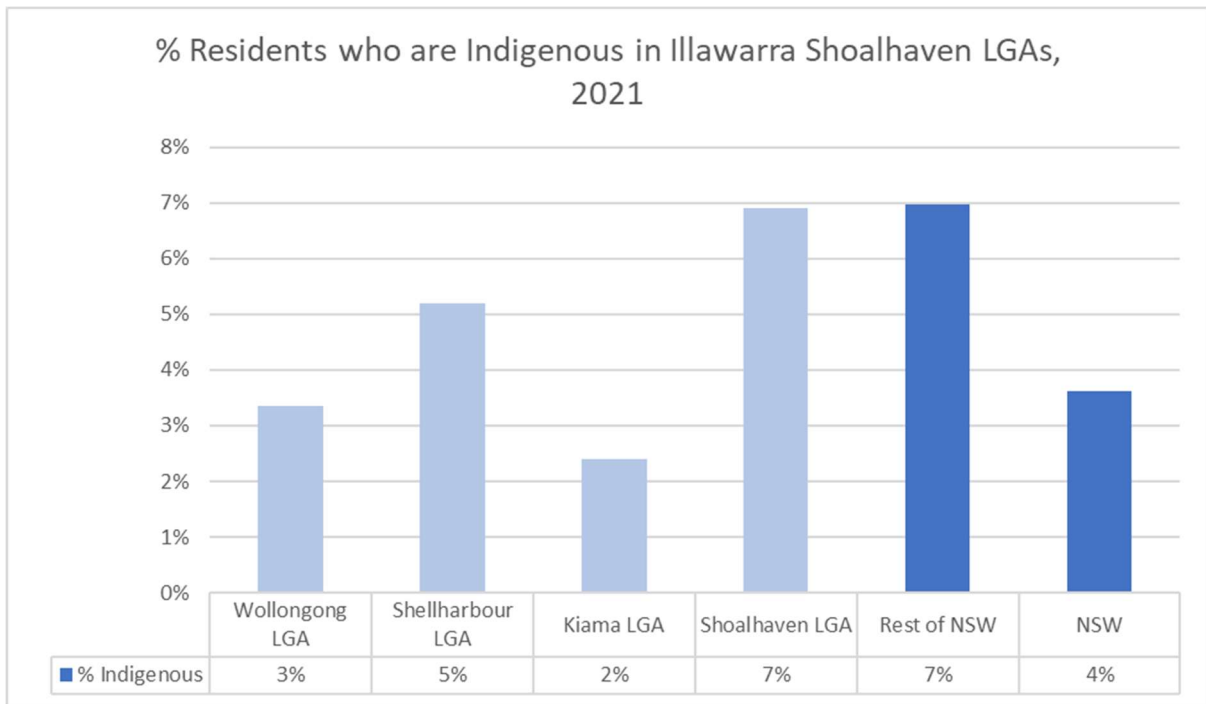


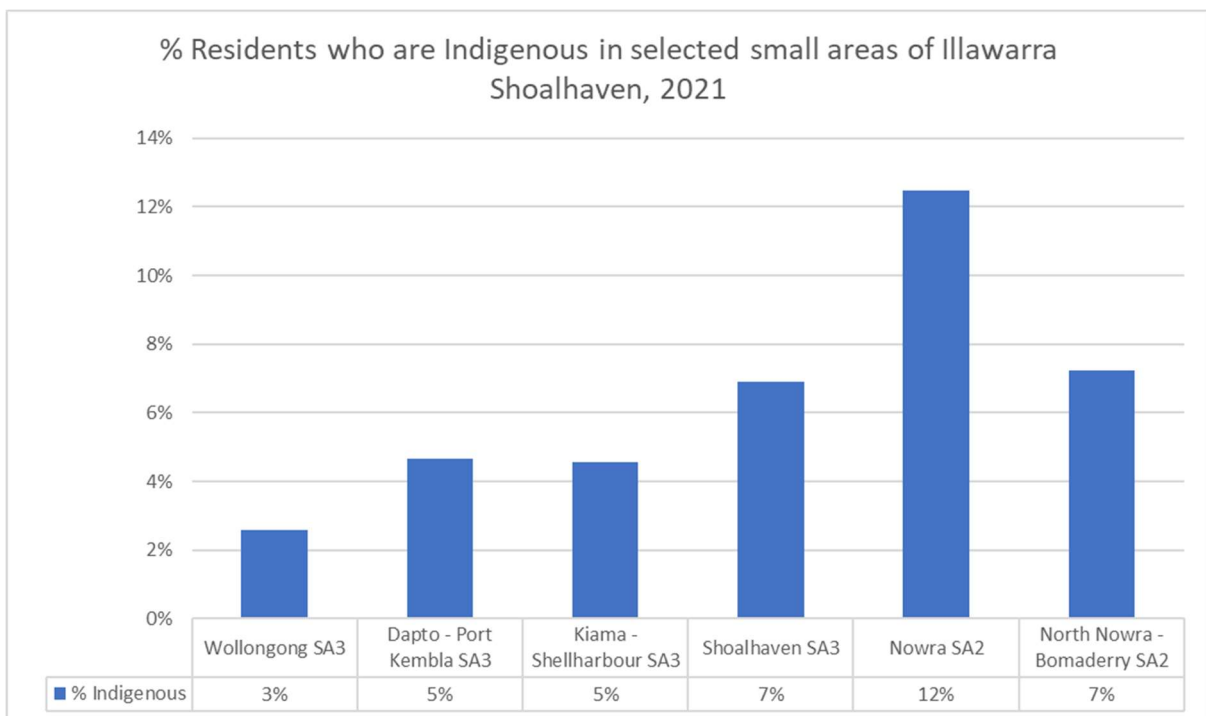
Figure 0-32: Indigenous profile Illawarra-Shoalhaven region

Source: ABS 2021, Census of Population and Housing, General Community Profiles



**Figure 0-33: Indigenous profile Illawarra Shoalhaven LGAs**

Source: ABS 2021, Census of Population and Housing, General Community Profiles



**Figure 0-34: Indigenous profile selected small areas of Illawarra Shoalhaven**

Source: ABS 2021, Census of Population and Housing, General Community Profiles

### 1.8.2 Country of birth profile

At the time of the 2021 Census, the Illawarra Shoalhaven Region had a much higher than average rate of people who were born outside Australia (19% compared with 13% for Rest of NSW), although much lower than NSW (31%), which is strongly influenced by Greater Sydney.

The strongest representation of people born overseas was Wollongong LGA (22%), and the lowest the Shoalhaven (14%), selected small areas quite representative of LGAs in this respect, as shown in the three graphs below.

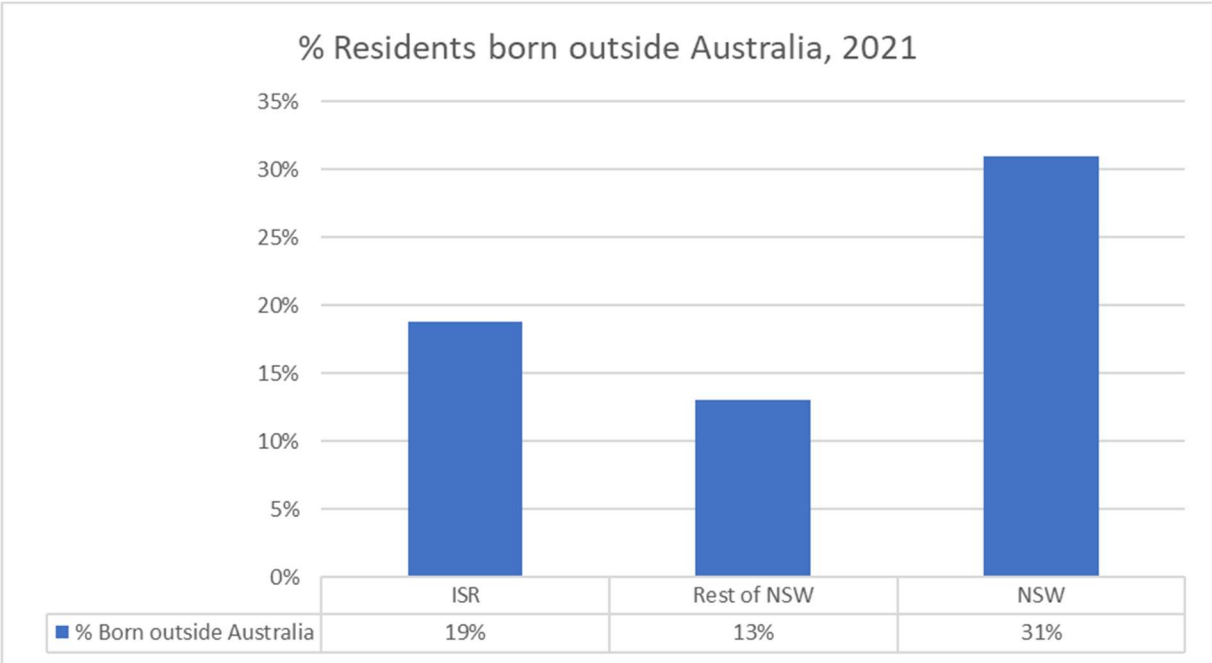
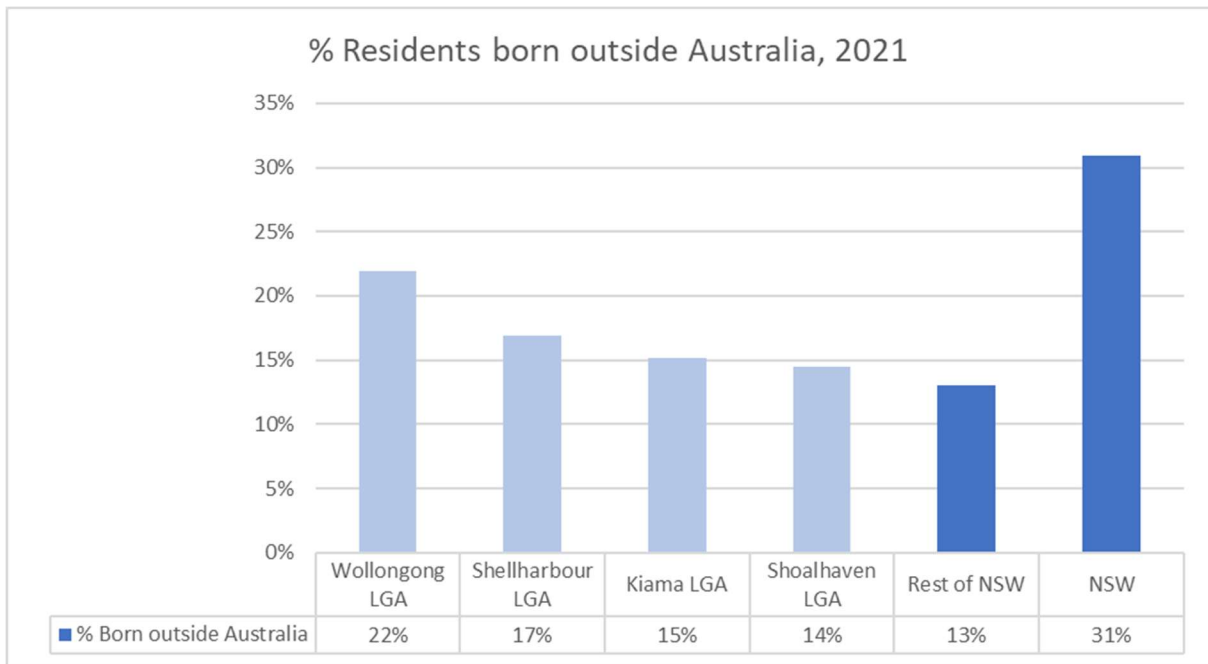


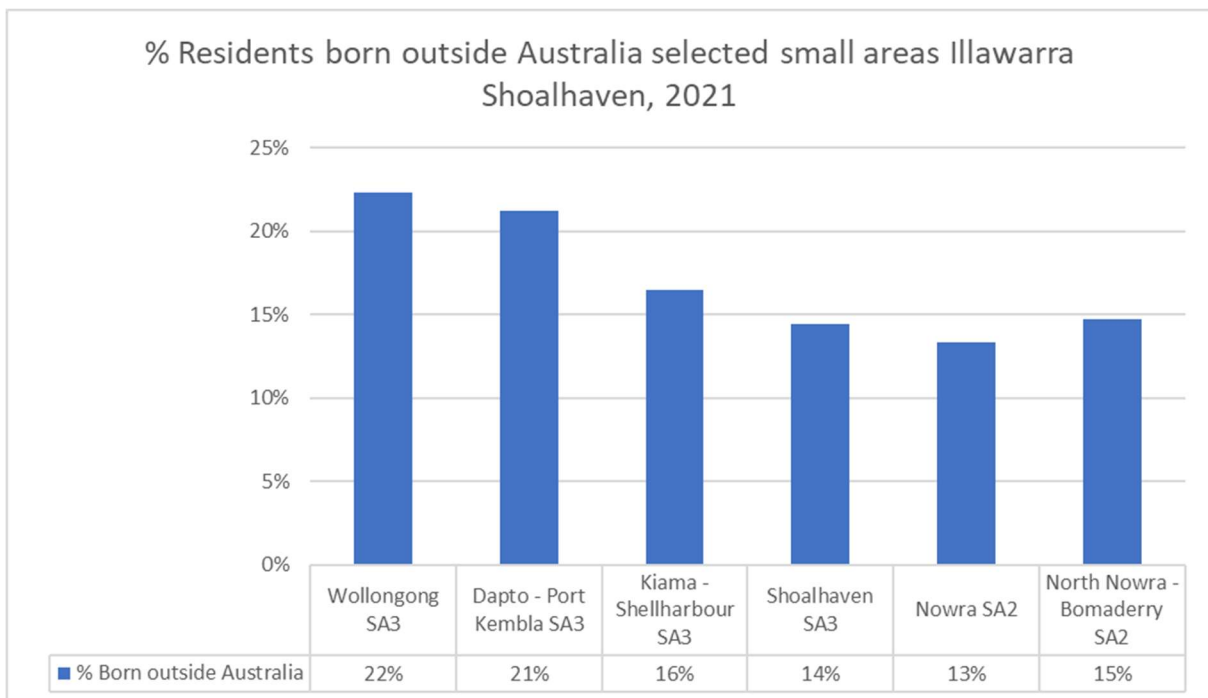
Figure 0-35: Country of birth profile Illawarra-Shoalhaven region

Source: ABS 2021, Census of Population and Housing, General Community Profiles



**Figure 0-36: Country of birth profile Illawarra Shoalhaven LGAs**

Source: ABS 2021, Census of Population and Housing, General Community Profiles



**Figure 0-37: Country of birth profile selected small areas of Illawarra Shoalhaven**

Source: ABS 2021, Census of Population and Housing, General Community Profiles

## 1.9 Education profile

### 1.9.1 Highest year of school completed

High school completion across the Illawarra Shoalhaven Region is slightly higher than the Rest of NSW average, but much lower than for NSW. Residents of Kiama and Wollongong were more likely than average, and of Shellharbour and Shoalhaven less likely than average, to have completed Year 12.

The only selected small area to reach the NSW average is Wollongong SA3 (the central and northern suburbs of Wollongong LGA), noting that when the LGA is disaggregated, the southern suburbs of Dapto-Port Kembla drop below the Rest of NSW average for high school completion, as shown below.

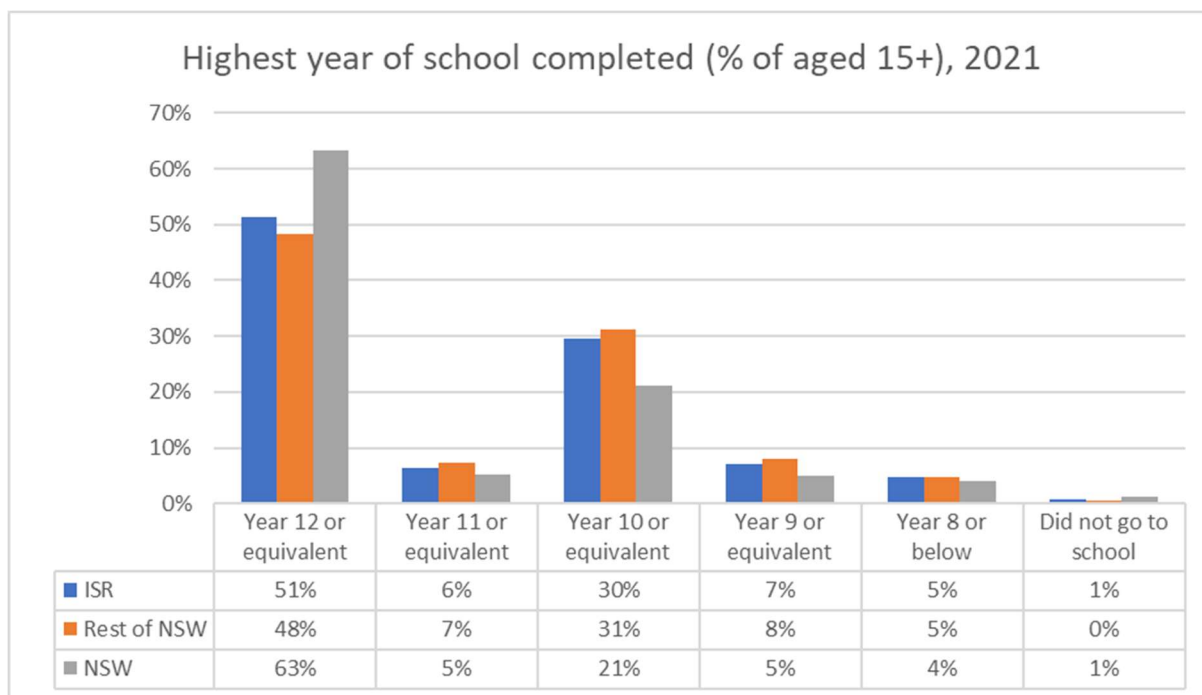


Figure 0-38: Highest year of school completed (% of residents aged 15+) ISR

Source: ABS 2021, Census of Population and Housing, General Community Profiles

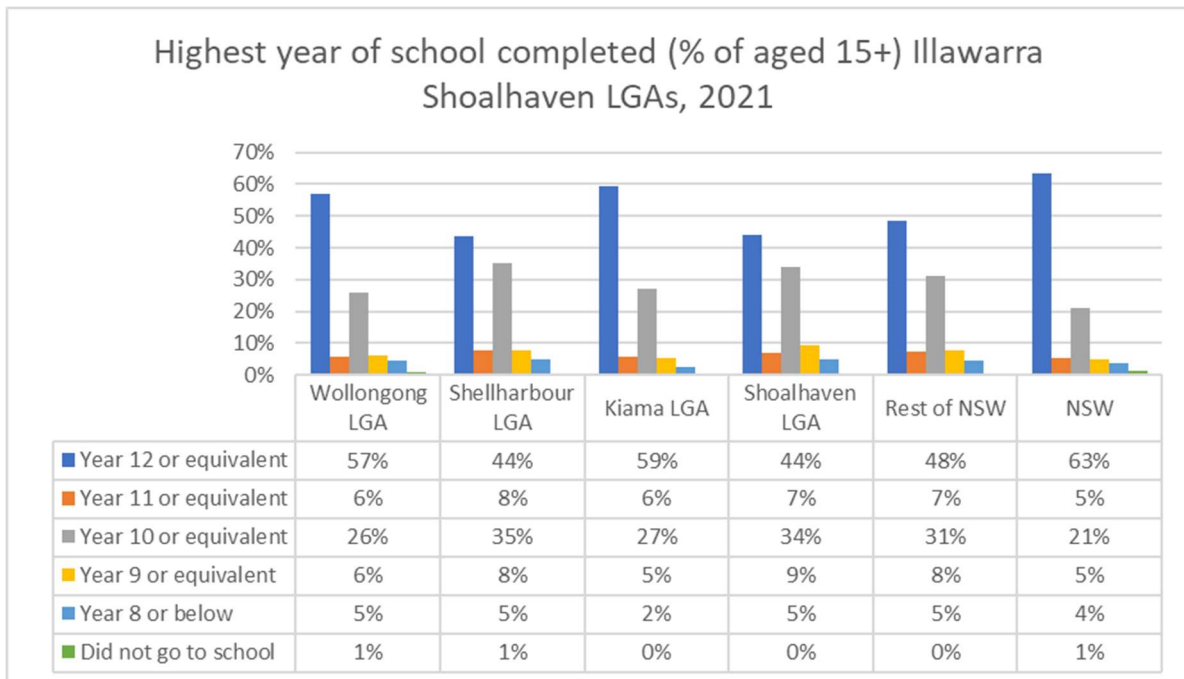


Figure 0-39: Highest year of school completed (% of residents aged 15+) Illawarra Shoalhaven LGAs

Source: ABS 2021, Census of Population and Housing, General Community Profiles

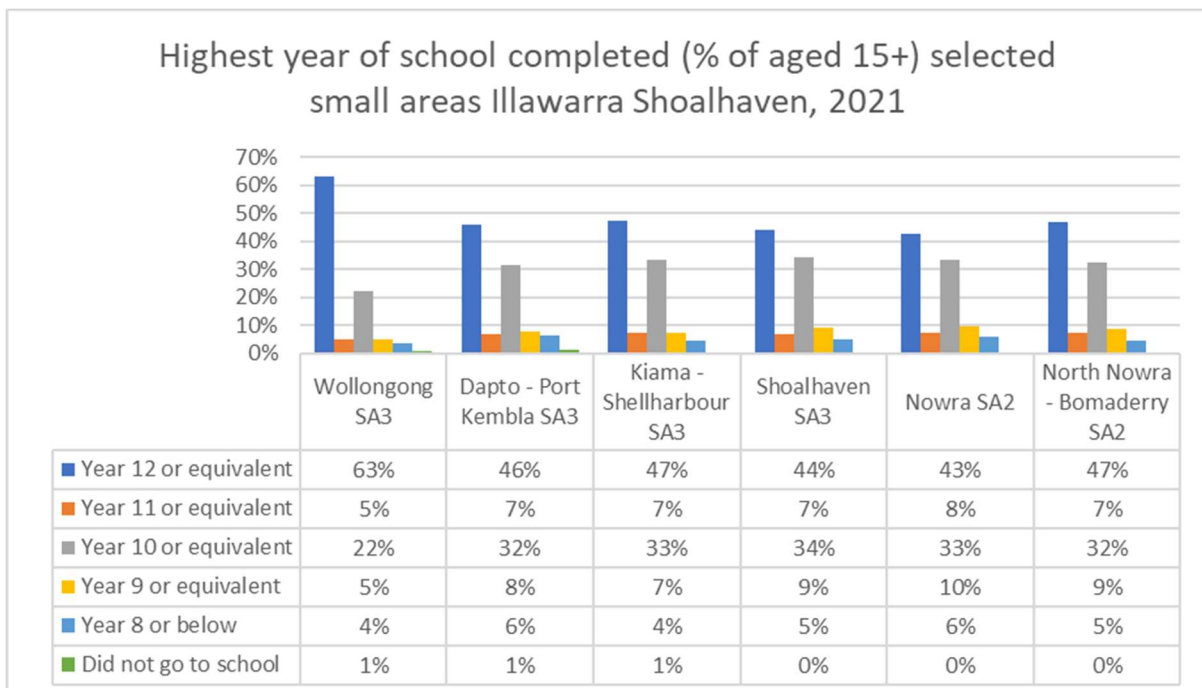


Figure 0-40: Highest year of school completed selected small areas of ISR

Source: ABS 2021, Census of Population and Housing, General Community Profiles

### 1.9.2 Post-Secondary School Qualifications

The Region as a whole has a somewhat more advantaged post-secondary educational profile of compared with Rest of NSW (Figure 0-41), but had a much lower rate of residents with Bachelor degrees or higher compared with NSW, which is strongly influenced by Greater Sydney.

Residents of Wollongong and Kiama LGAs are more advantaged educationally on this indicator than the residents of Shellharbour and Shoalhaven LGAs (Figure 0-42). One third of Kiama residents aged 15 years or more and no longer in school had a Bachelor degree or higher in 2021, and seven percent of both Wollongong and Kiama residents had a postgraduate degree. Shellharbour and Shoalhaven residents were more likely to hold a Certificate qualification.

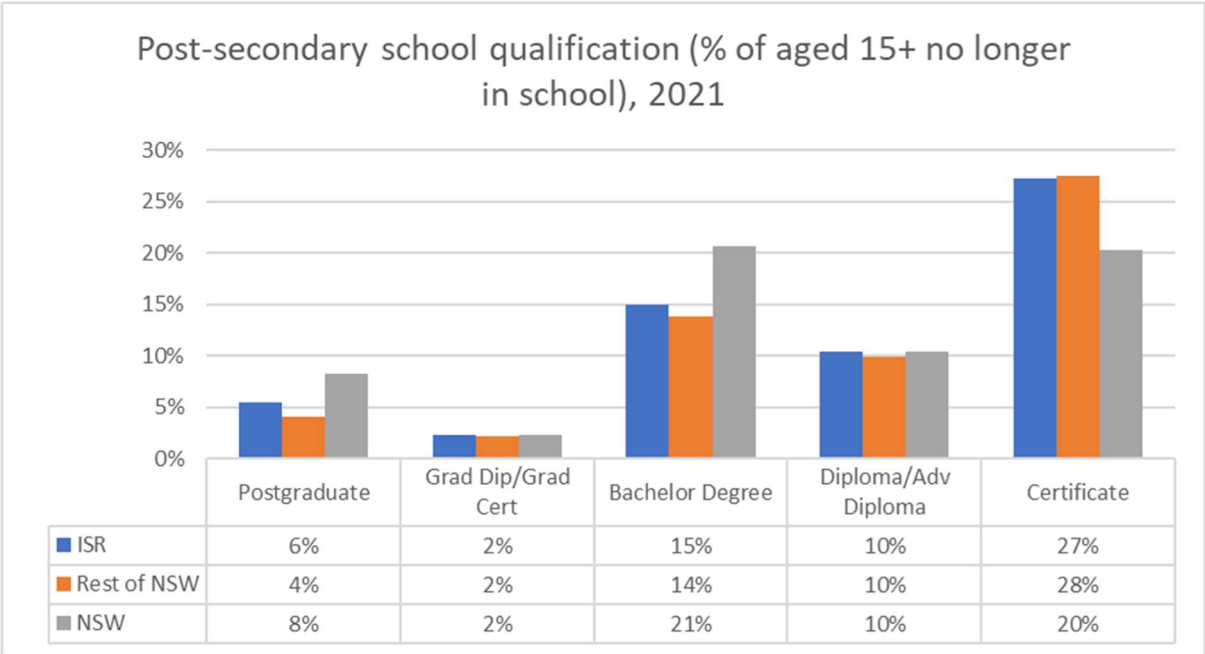


Figure 0-41: Post-Secondary Qualifications (% of residents aged 15+), by region

Source: ABS 2021, Census of Population and Housing, General Community Profiles



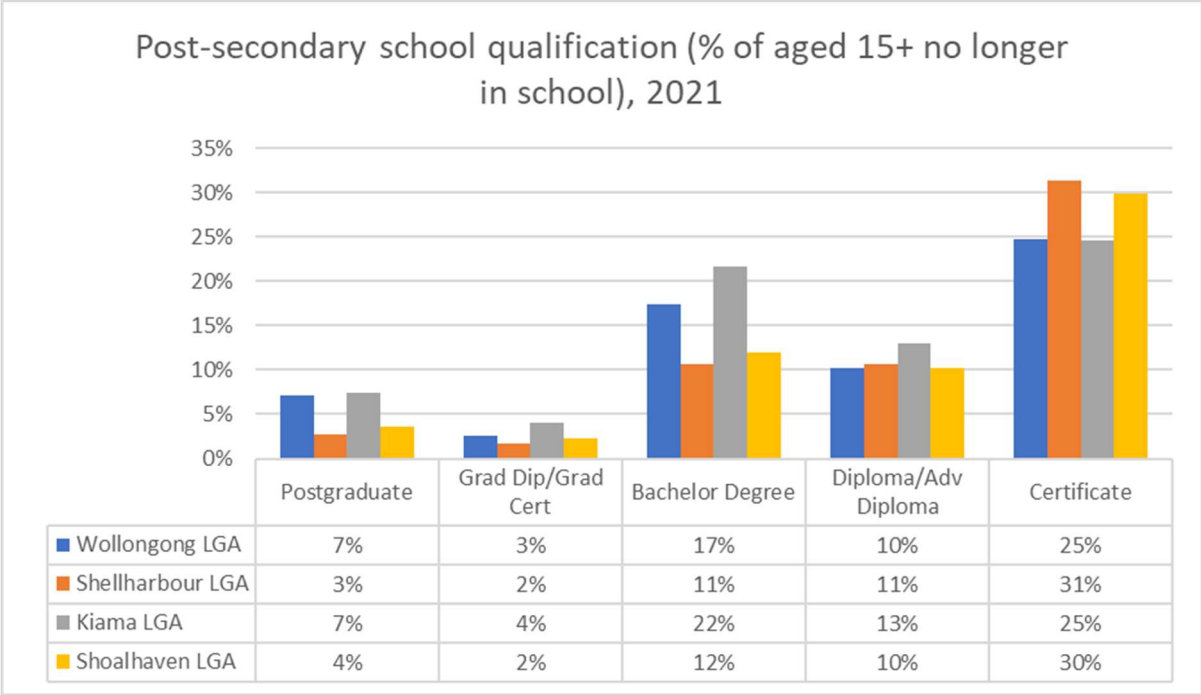


Figure 0-42: Post-Secondary Qualifications (% of residents aged 15+), by LGA

Source: ABS 2021, Census of Population and Housing, General Community Profiles

## 1.10 Industry and Occupational Profile

### 1.10.1 Industry of Employment Profile 2021

#### Illawarra Shoalhaven Region

The first of the following graphs shows the ‘top 10’ industries of employment at the time of the 2021 Census, whilst the second graph shows the remaining nine industries, in order of importance for the Illawarra Shoalhaven Region.

Health Care and Social Assistance was by far the largest industry of employment in the Region in 2021, with a slightly higher than average rate of regional jobs in this sector. This was followed by Construction, Education and Training, and Retail Trade, which were all represented at roughly average rates, and with these four industries accounting for around half or all regional jobs in 2021.

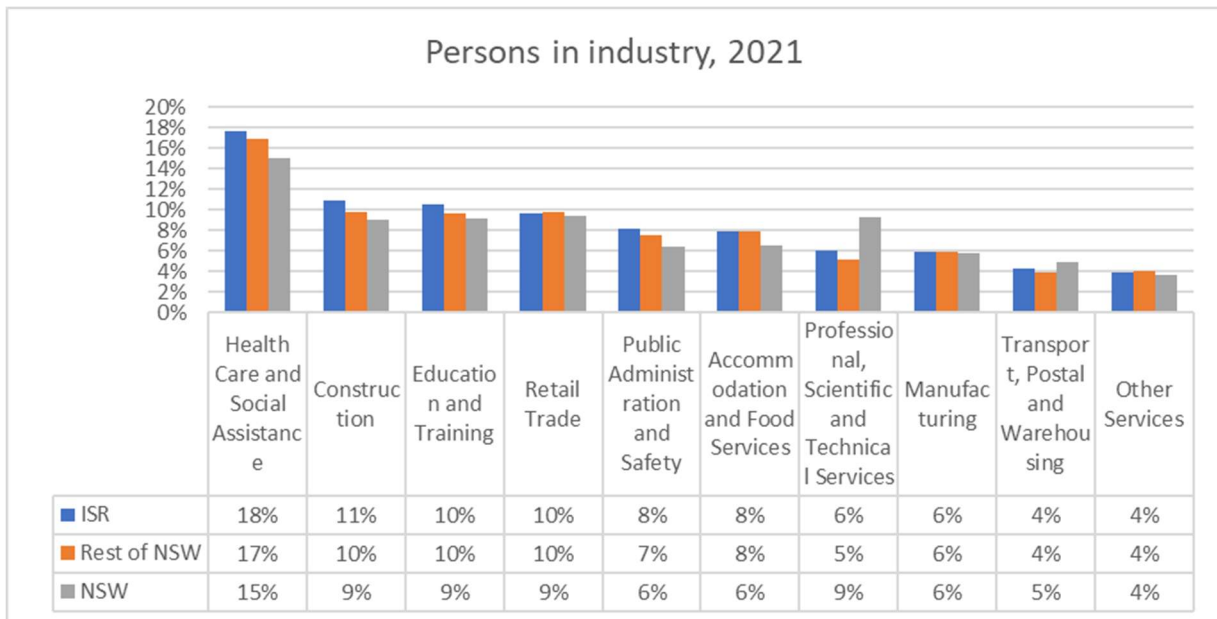


Figure 0-43: Employment by Industry Sector Illawarra-Shoalhaven Region ('top 10')

Source: JSA 2022, derived from ABS 2021 Census, TableBuilder Pro

Employment in the remaining nine sectors accounted for around 15% of regional employment, with jobs in Wholesale, Mining, and Agriculture, Fishing and Forestry significantly under-represented in the regional labour force compared with Rest of NSW, and jobs in Financial and Insurance Services slightly over-represented, though much lower than NSW, which is strongly influenced by the Greater Sydney job market, as shown below.

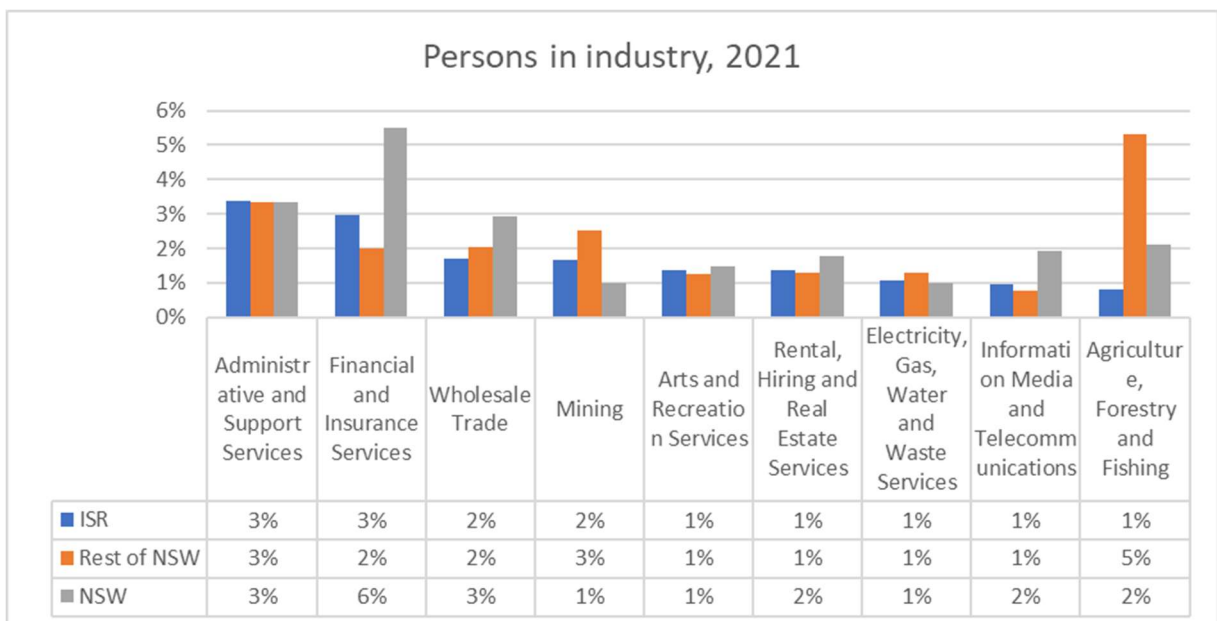


Figure 0-44: Employment by Industry Sector Illawarra-Shoalhaven Region ('remaining 9')

Source: JSA 2022, derived from ABS 2021 Census, TableBuilder Pro

### Local Government Areas

Health Care and Social Assistance was by far the largest industry of employment in all LGAs in the Region, although slightly lower than average in Kiama and Shoalhaven LGAs.

There was some slight reordering of importance of different industry sector in other industries, with Construction somewhat more important for employed people in Shellharbour, Kiama and Shoalhaven; Education and Training more important in Kiama and Wollongong; less people employed in Retail in Kiama and Wollongong; and jobs in Public Administration and in Accommodation and Food Services more important for workers in Kiama and the Shoalhaven. Professional Services had a higher than average rate of employment for workers in Wollongong and Kiama.

It is noted that this analysis represents the industry in which local residents are employed, and not jobs in the LGA, which are considered later in this report in Journey to Work data.

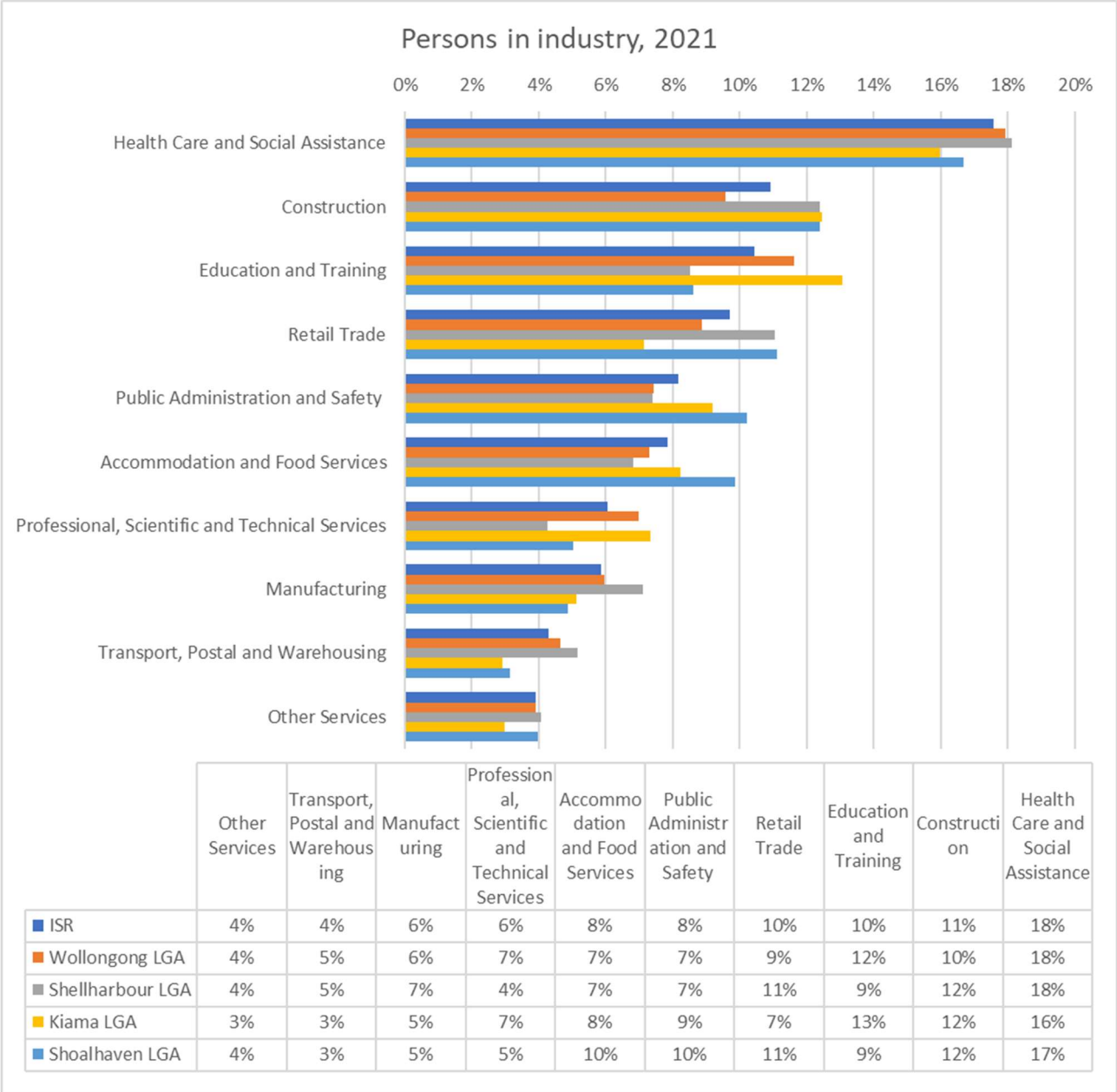


Figure 0-45: Employment by Industry Sector Illawarra-Shoalhaven Region LGAs ('top 10')

Source: JSA 2022, derived from ABS 2021 Census, TableBuilder Pro

There were relatively similar rates of people employed in the ‘bottom nine’ industries across the four regional LGAs, noting that scaling on the graph below makes these differences appear greater than those above.

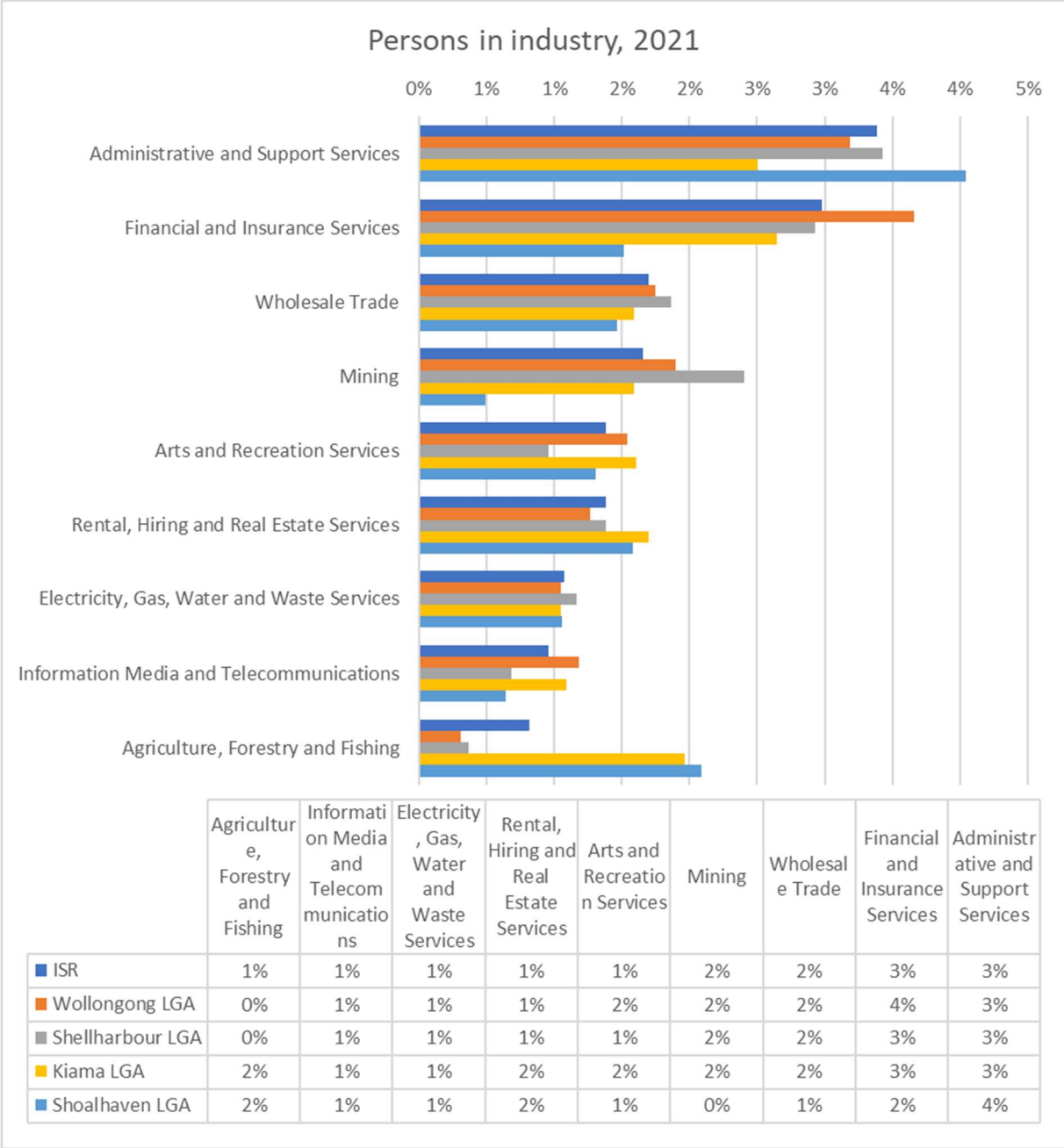


Figure 0-46: Employment by Industry Sector ISR LGAs (‘remaining 9’)

Source: JSA 2022, derived from ABS 2021 Census, TableBuilder Pro

### 1.10.2 Industry of Employment Profile: Absolute % Change 2016-21

#### Illawarra Shoalhaven Region

Overall, the regional workforce grew by 13% over the past 5 years.

The industries with the highest growth in absolute (proportional) terms were Health Care and Social Assistance, and Professional, Scientific and Technical Services, which both increased their workforce by 30%, noting the latter was from a much lower base. The growth rate of each of these was above the Rest of NSW and NSW averages. Other industries with high rates of proportional growth were Construction, Public Administration, Education, Electricity and other utilities, and Manufacturing (all above 10%).

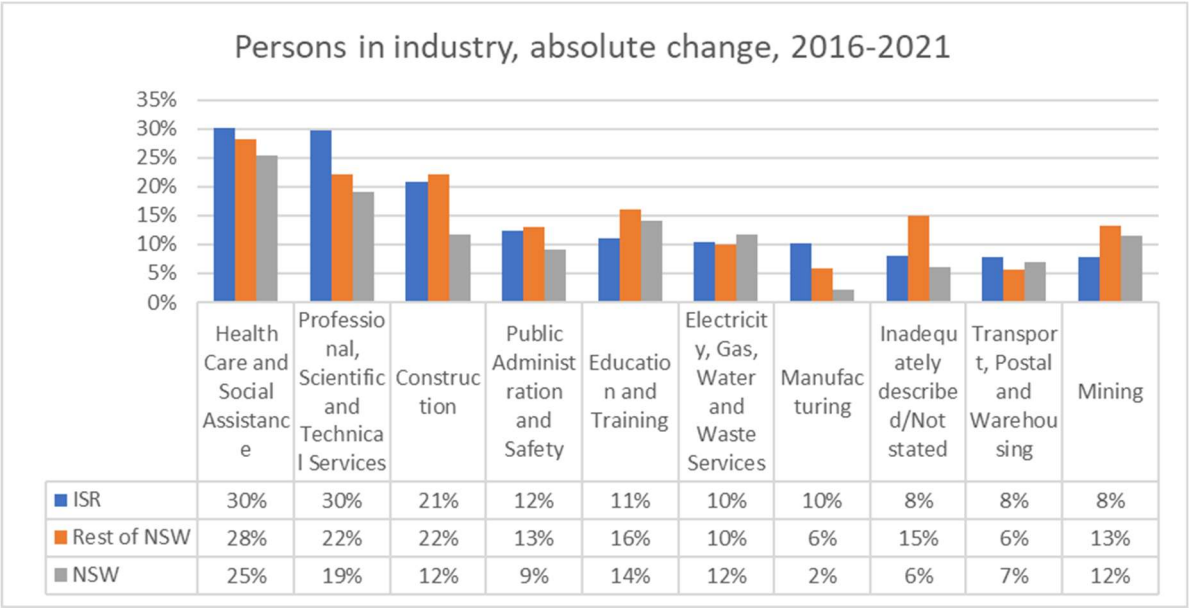


Figure 0-47: Employment by Industry Sector ISR: absolute % change 2016-21 ('top 10')

Source: JSA 2022, derived from ABS 2021 Census, TableBuilder Pro

There were particularly low rates of growth in the Region in Arts and Recreation Services, Administrative and Support Services, Retail Trade, and Real Estate Services; and higher than average growth in Information, Media and Telecommunications, as shown below.

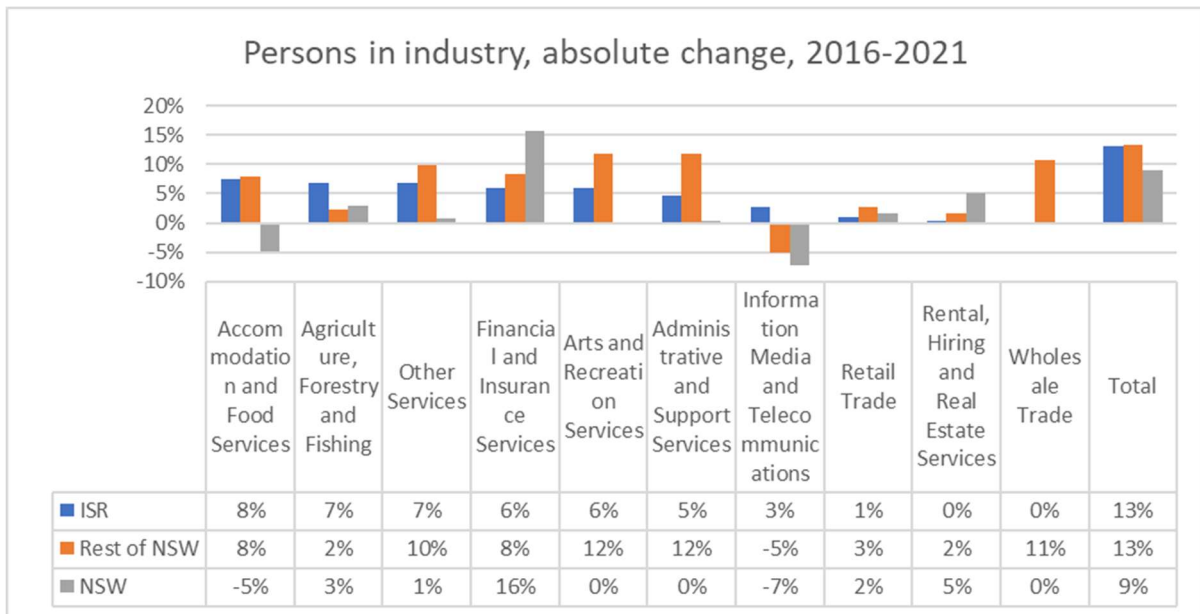


Figure 0-48: Employment by Industry Sector ISR: absolute % change 2016-21 ('remaining 9')

Source: JSA 2022, derived from ABS 2021 Census, TableBuilder Pro

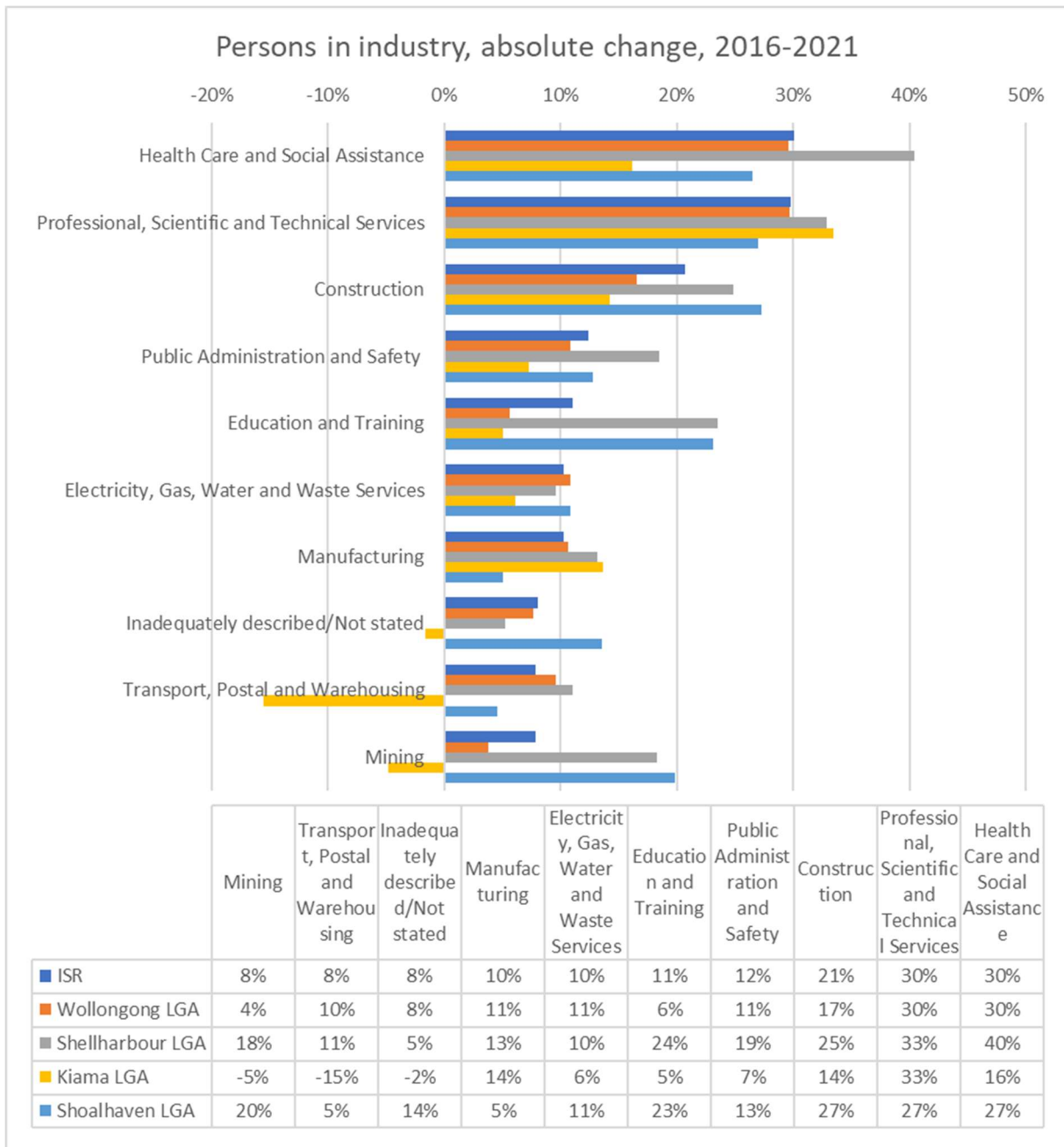
## Local Government Areas

The labour forces of Shellharbour and Shoalhaven LGAs grew at well above average rates from 2016-21 (17% and 16% respectively compared with 13% for the Region). There was lower than average growth in employed people in Wollongong LGA (11%), and particularly low growth in employed people in Kiama LGA (8%) over the period. Although this may be expected from the much older than average age structure of Kiama, this is clearly not the only factor, as Shoalhaven has experienced the highest labour force growth in the Region and has a much older than average age profile.

There was a particularly high rate of growth in employment in Health Care and Social Assistance in Shellharbour LGA, and a particularly low rate of growth in this sector in Kiama LGA, despite its old and rapidly aging population.

Growth in local residents employed in Construction, and in Education and Training was disproportionately high in Shellharbour and Shoalhaven LGAs, and much lower than average in both these sectors in Wollongong and Kiama LGAs.

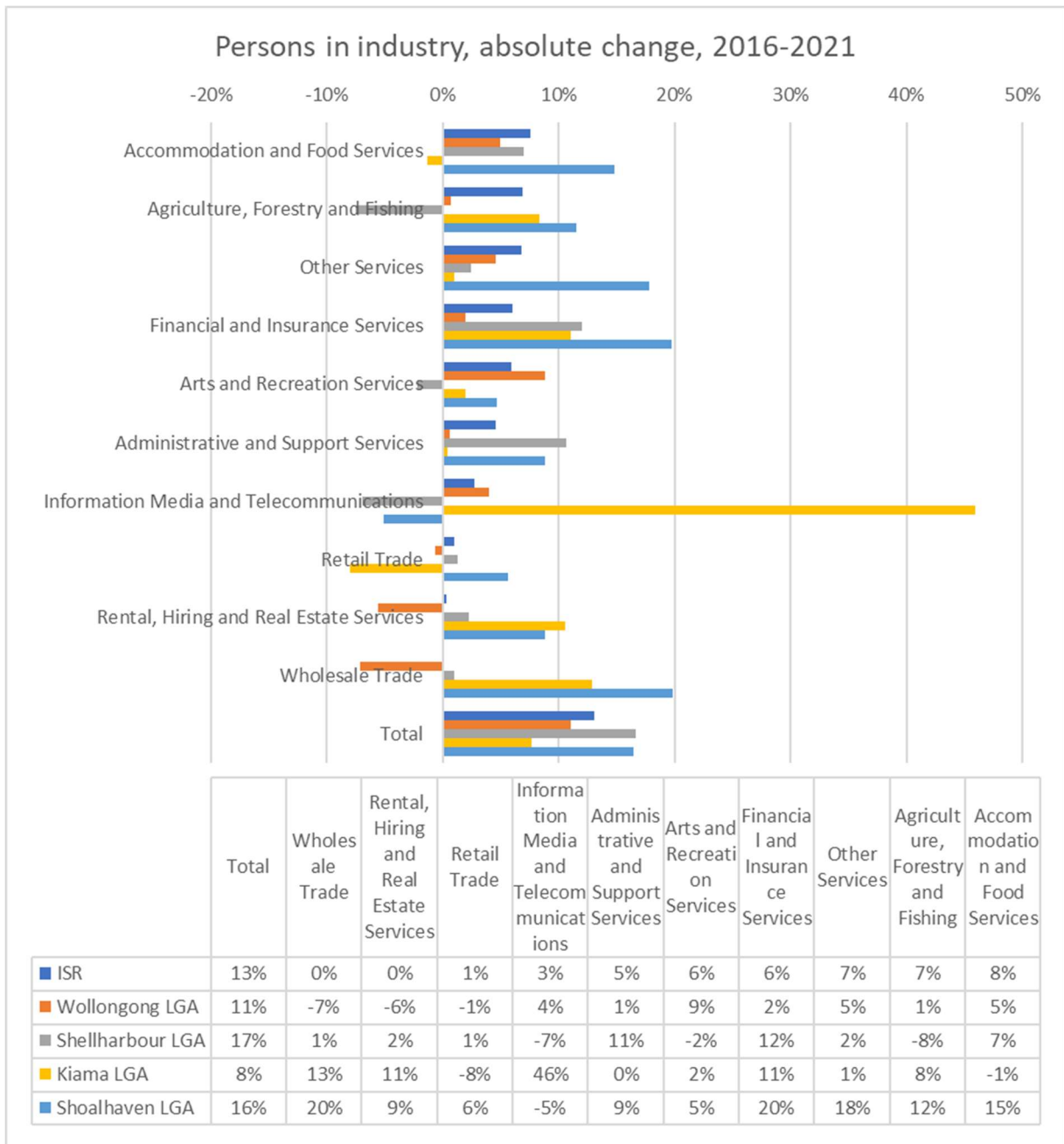
Kiama LGA also had much lower than average growth of local residents employed in Construction, Public Administration, Electricity, Gas and Water, and negative growth in Transport, Postal and Warehousing and in Mining, as shown below.



**Figure 0-49: Employment by Industry Sector ISR LGAs: absolute % change 2016-21 ('top 10')**

Source: JSA 2022, derived from ABS 2021 Census, TableBuilder Pro

Sectors with the lowest proportional growth from 2016-21 are shown below. Lower than average rates of growth are evident in Accommodation and Food Services in Kiama and Wollongong LGAs; in Agriculture in Shellharbour and Wollongong; and in Financial Services in Wollongong; There was particularly strong growth in Shoalhaven LGA in residents working in Wholesale; Retail; Accommodation and Food Services; Real Estate Services; Agriculture, Forestry and Fishing; and Administrative Services; and Financial Services. Kiama LGA had much higher than average rates of growth in Information, Media and Telecommunications, as well as in Wholesale; Real Estate Services; and Financial Services, as shown below.



**Figure 0-50: Employment by Industry Sector ISR LGAs: absolute % change 2016-21 ('remaining 9')**

Source: JSA 2022, derived from ABS 2021 Census, TableBuilder Pro

This is shown in absolute terms in the table below.



Table 0.3: Industry of Employment, 2016, 2021, and change (number) between 2016 and 2021, by LGA

Industry of Employment	Year	Wollongong	Shellharbour	Kiama	Shoalhaven
Health Care & Social Assistance	2016	13,077	4,290	1,362	5,356
	2021	16,950	6,023	1,582	6,777
	Change	+3,873	+1,733	+220	+1,421
Construction	2016	7,758	3,302	1,079	3,960
	2021	9,045	4,124	1,233	5,039
	Change	+1,287	+822	+154	+1,079
Education and Training	2016	10,396	2,294	1,232	2,842
	2021	10,985	2,834	1,294	3,498
	Change	+589	+540	+62	+656
Retail Trade	2016	8,421	3,632	767	4,278
	2021	8,369	3,677	706	4,519
	Change	-52	+45	-61	+241
Public Administration and Safety	2016	6,342	2,072	847	3,679
	2021	7,032	2,456	909	4,148
	Change	+690	+384	+62	+469
Accommodation and Food Services	2016	6,566	2,119	825	3,497
	2021	6,889	2,268	814	4,016
	Change	+323	+149	-11	+519
Professional, Scientific and Technical Services	2016	5,088	1,065	544	1,612
	2021	6,598	1,415	726	2,047
	Change	+1,510	+350	+182	+435
Manufacturing	2016	5,080	2,087	446	1,882
	2021	5,621	2,362	507	1,977
	Change	+541	+275	+61	+95
Transport, Postal and Warehousing	2016	3,993	1,543	342	1,226
	2021	4,377	1,713	289	1,282
	Change	+384	+170	-53	+56
Other Services	2016	3,514	1,322	293	1,373
	2021	3,676	1,354	296	1,618
	Change	+162	+32	+3	+245
Administrative and Support Services	2016	2,991	1,031	247	1,511
	2021	3,010	1,141	248	1,645
	Change	+19	+110	+1	+134
Financial and Insurance Services	2016	3,392	871	236	516
	2021	3,460	976	262	618
	Change	+68	+105	+26	+102
Wholesale Trade	2016	1,780	614	140	498
	2021	1,654	620	158	597
	Change	-126	+6	+18	+99
Mining	2016	1,730	676	166	166
	2021	1,795	800	158	199

Industry of Employment	Year	Wollongong	Shellharbour	Kiama	Shoalhaven
	Change	+65	+124	-8	+33
Arts and Recreation Services	2016	1,340	326	156	509
	2021	1,458	319	159	533
	Change	+118	-7	+3	+24
Rental, Hiring and Real Estate Services	2016	1,263	450	152	590
	2021	1,193	460	168	642
	Change	-70	+10	+16	+52
Electricity, Gas, Water and Waste Services	2016	895	354	98	388
	2021	992	388	104	430
	Change	+97	+34	+6	+42
Information Media and Telecommunications	2016	1,075	245	74	277
	2021	1,118	228	108	263
	Change	+43	-17	+34	-14
Agriculture, Forestry and Fishing	2016	294	133	180	762
	2021	296	123	195	850
	Change	+2	-10	+15	+88
Total employed persons	2016	88,251	29,606	9,488	36,330
	2021	98,020	34,522	10,213	42,293
	Change	+9,769	+4,916	+725	+5,963

Source: JSA 2022, derived from ABS (2021) Census, Basic Community Profiles, G56, and ABS (2016) Census, Basic Community Profiles, G53. Total of industries of employment does not equal total employed persons due to Inadequately Described/Not Stated responses.

### 1.10.3 Industry of Employment Profile: Relative % ('market share') Change 2016-21

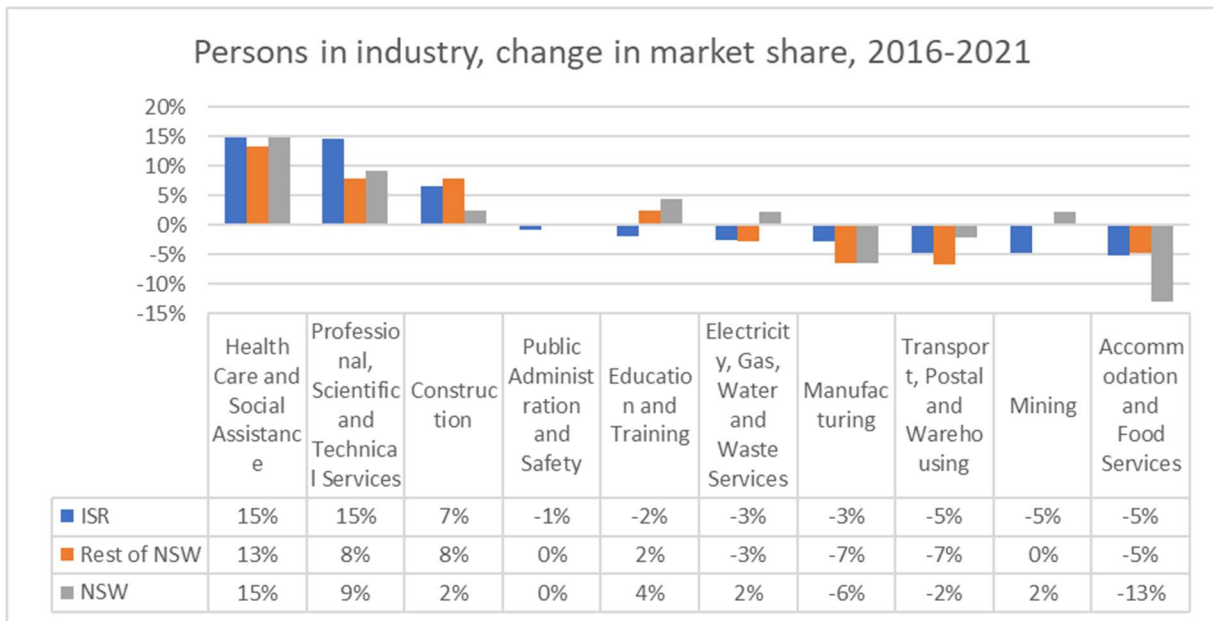
#### Illawarra Shoalhaven Region

The following graphs show the relative change in importance of resident employment (or 'market share' of the workforce) in these sectors from 2016-21.

They indicate that the only three industry sectors increased in relative importance or 'market share' over the 5 years to 2021. These were principally Health Care and Social Assistance, and Professional, Scientific and Technical Services, and to a lesser extent, Construction.

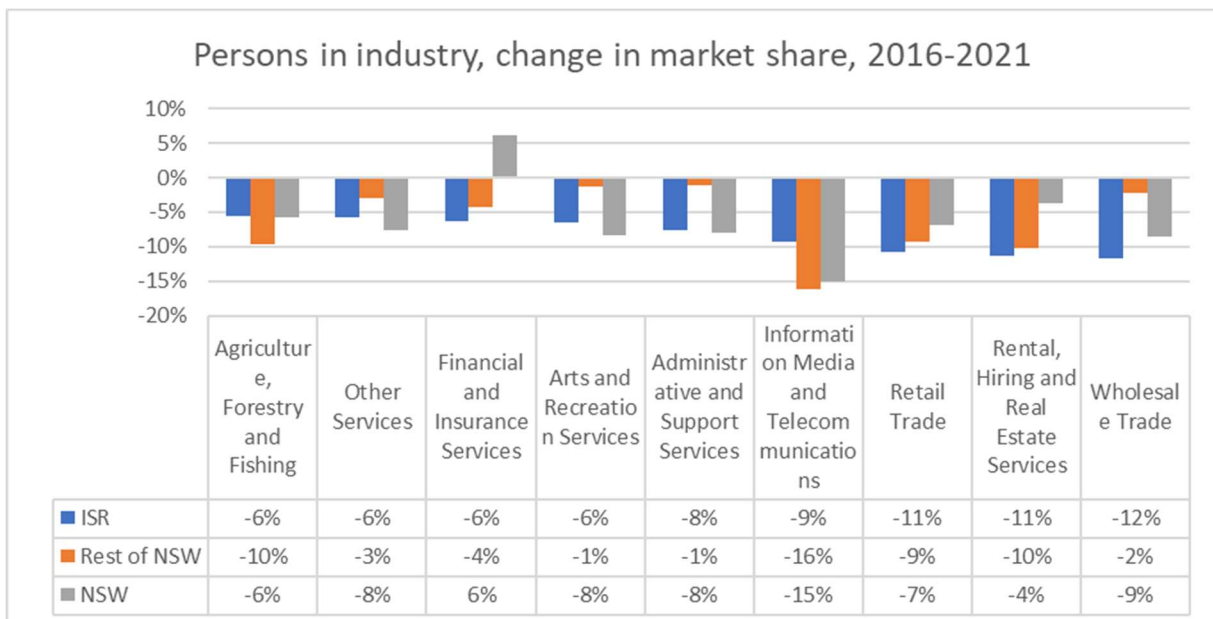
Sectors that became much less important across the Region as a whole included Wholesale; Retail; Real Estate Services; Information, Media and Telecommunications; and Administrative Services.

This is shown in the following two graphs.



**Figure 0-51: Employment by Industry Sector ISR: relative change % ('market share') 2016-21 ('top 10')**

Source: JSA 2022, derived from ABS 2021 Census, TableBuilder Pro



**Figure 0-52: Employment by Industry Sector ISR: relative change % ('market share') 2016-21 ('remaining 9')**

Source: JSA 2022, derived from ABS 2021 Census, TableBuilder Pro

## Local Government Areas

Changes in the relative importance of different industry sectors to the regional economy were quite similar across the four LGA, with some local differences.

In particular, Health Care and Social Assistance became more important than average to workers in Wollongong and Shellharbour LGAs, and less important in the other two LGAs; while Professional, Scientific and Technical Services became far more important in Kiama and far less

important to Shoalhaven LGA in terms of the relative proportion of local workers employed in these sectors.

Again, the declining importance of most other sectors in terms of ‘market share’ of local resident employed is noted in all other sectors apart from Construction, although there were a few major differences at the LGA scale, including the increased importance of Information, Media and Telecommunications, Manufacturing, Real Estate Services, Financial Services, and Wholesale to Kiama (with the latter two also growing in importance in Shoalhaven); and of Education and Training and of Mining to Shellharbour and Shoalhaven LGAs.

This is shown in more detail in the following two graphs.

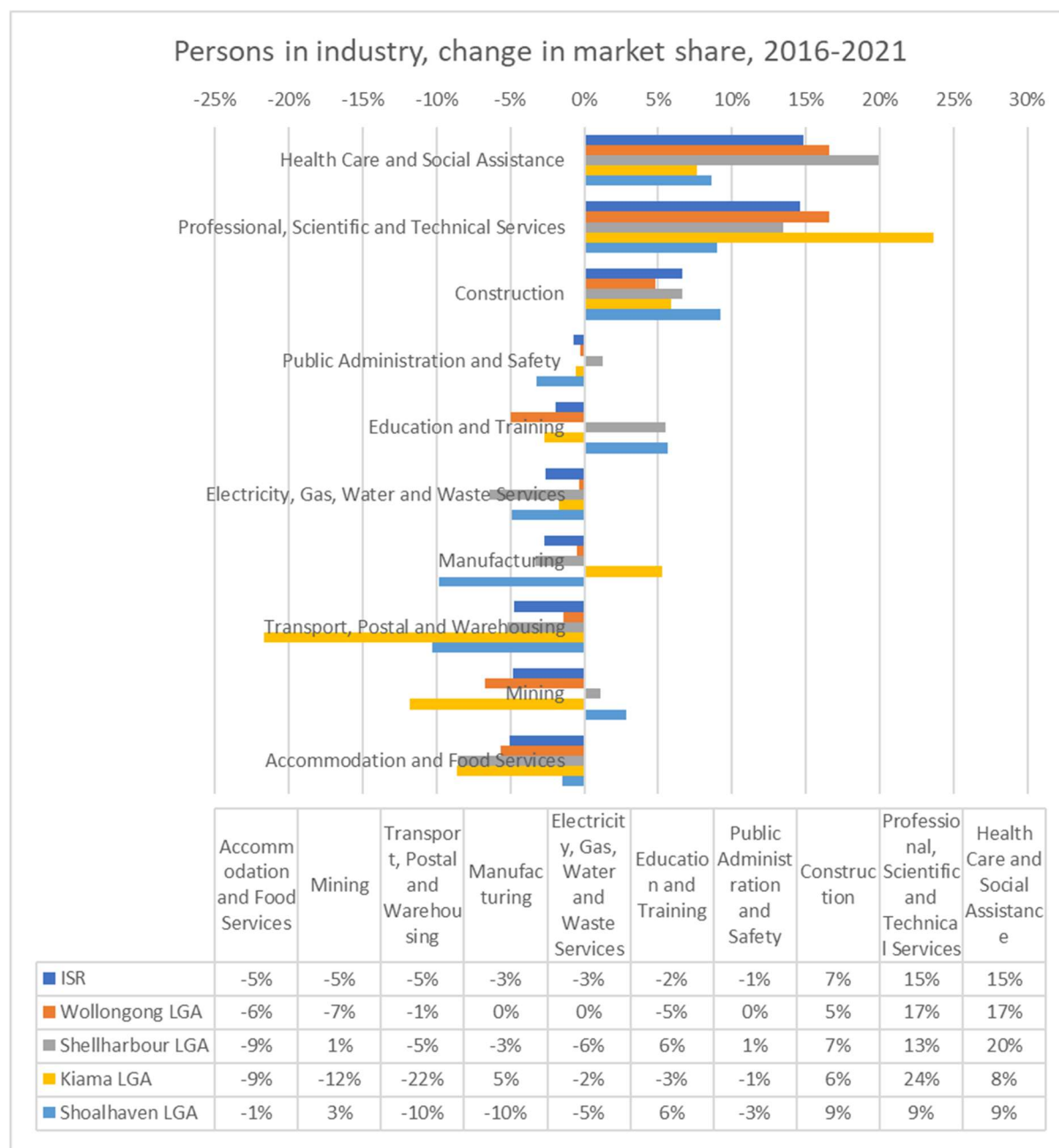


Figure 0-53: Employment by Industry Sector ISR LGAs: relative change % (‘market share’) 2016-21 (‘top 10’)

Source: JSA 2022, derived from ABS 2021 Census, TableBuilder Pro

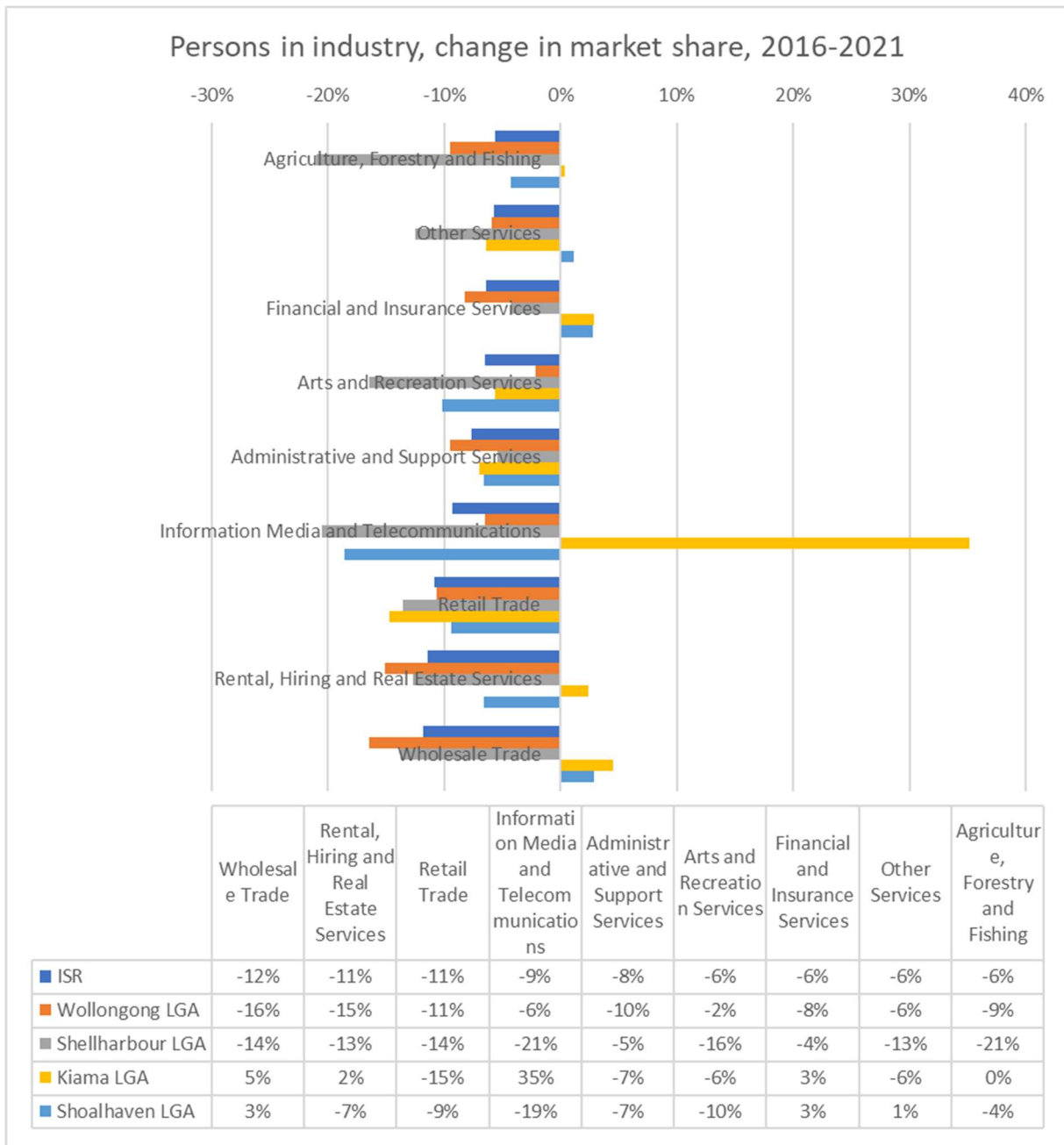


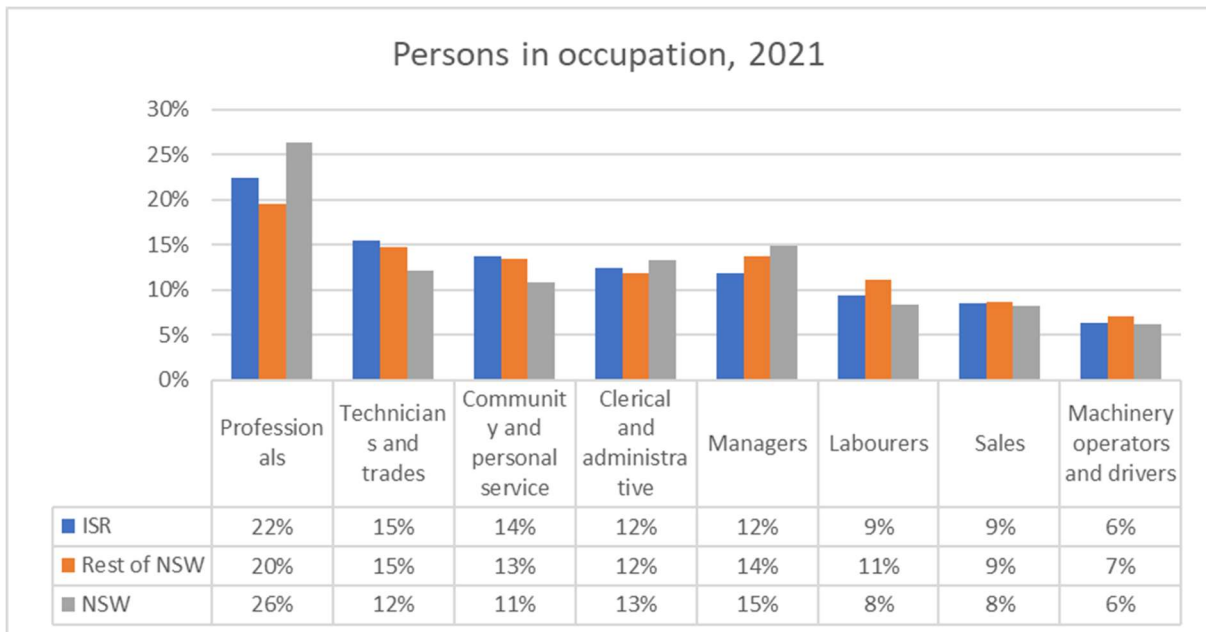
Figure 0-54: Employment by Industry Sector ISR LGAs: relative change % ('market share') 2016-21 ('remaining 9')

Source: JSA 2022, derived from ABS 2021 Census, TableBuilder Pro

### 1.10.4 Occupational Profile 2021

#### Illawarra Shoalhaven Region

The Illawarra Shoalhaven Region had a lower rate of residents employed as Professionals and Managers compared with NSW, and higher than State average rate of people employed as Community and Personal Services workers, Technicians and Tradespeople and Labourers, as shown below.



**Figure 0-55: Occupation Profile ISR 2021**

Source: JSA 2022, derived from ABS 2021 Census, TableBuilder Pro

## Local Government Areas

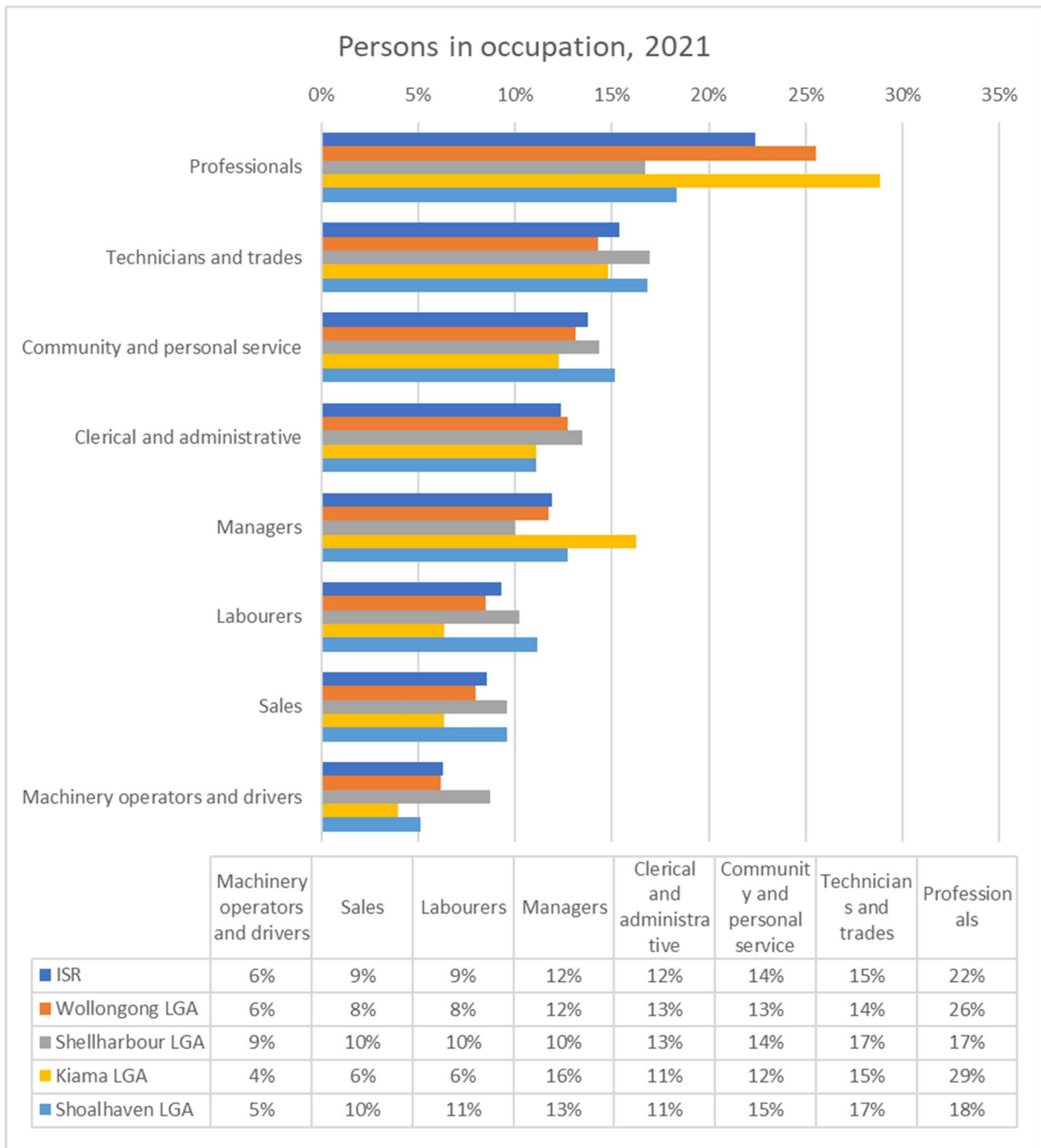
The relative occupational engagement of the local labour force was also quite different in the four LGAs in some respects.

For Wollongong LGA, there was a higher than average rate of people working as Professionals, and some minor differences from the regional average in some other occupations.

For Shellharbour LGA, there was a higher than average rate of local people employed as Machine Operators and Drivers, and Technicians and Tradespeople in particular; and a lower than average rate as Managers and Professionals, and more minor differences across other categories.

For Kiama LGA, there were some reasonable differences, including a much lower than average rate of local residents employed as Labourers, Salespeople, Machinery Operators, and as Community and Personal Service workers; and a much higher rate of Professionals, and Managers.

For Shoalhaven LGA, a disproportionate rate of local people were employed as Labourers, and as Technicians and Tradespeople in particular, as well as a slightly higher than average rate as Salespeople, Managers, and Community and Personal Service workers; and a lower than average rate of Professionals in particular, as shown below.



**Figure 0-56: Occupation Profile ISR LGAs 2021**

Source: JSA 2022, derived from ABS 2021 Census, TableBuilder Pro

### 1.10.5 Occupational Profile: Absolute % Change 2016-21

#### Illawarra Shoalhaven Region

Occupations with the highest proportional change in absolute terms in the Region from 2016-21 were Managers, Professionals and Community and Personal Service workers, each with a 20% or greater increase in their workforce.

There was somewhat lower than average growth in people employed as Technicians and Tradespeople, Machinery Operators, and Clerical workers, and negative growth in Sales workers over the period.

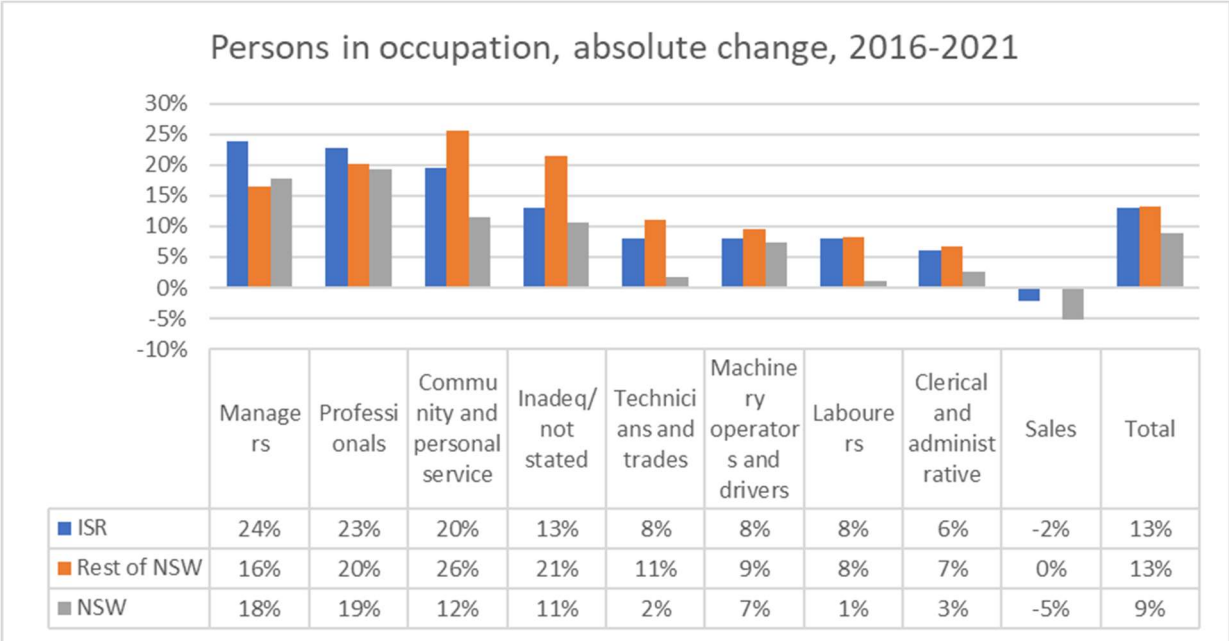


Figure 0-57: Occupation Profile ISR: absolute % change ISR 2016-21

Source: JSA 2022, derived from ABS 2021 Census, TableBuilder Pro

### Local Government Areas

There are some significant differences between the four LGAs in terms of absolute proportional growth in different occupations.

There was much higher than average growth among Professionals, as well as Community and Personal Service workers, Clerical workers, Managers and Tradespeople in Shellharbour LGA, although net growth across most occupations is also related to the higher than average employment growth in the LGA more generally.

In a related way, Wollongong LGA had lower than average growth across most occupations, which reflected its lower than average growth overall. The highest growth in the LGA was in Professionals, Managers and among Community and Personal Service workers; and there was much lower than average growth among Labourers, Community and Personal Service, Clerical workers, and Tradespeople. This likely in part reflects ongoing growing gentrification of the LGA amid real increases in rent and sales prices in some years.

In line with its relatively low growth in employed people from 2016-21, Kiama LGA has much lower growth across all occupational groups, and actually experienced strong negative growth among people employed as Sales workers, and Machinery and Plant Operators, as well as Administrative workers; and particularly low growth among Community and Personal Service workers, and Labourers. Although this is related to lower growth overall, the nature of low and negative growth also indicates the likelihood that those in lower paying occupations have left the LGA, and are no longer able to afford to move there.



Shoalhaven LGA experienced higher than average growth in employment across the board, as discussed above, and much higher than average growth in diverse occupations, including Clerical, Labourers, Tradespeople, and Community and Personal Service workers, and somewhat higher than average growth among Manager and Professionals as well. It was the only LGA to experience positive growth in Sales workers. This indicates that the LGA is likely to maintaining a more balanced occupational profile over time that Kiama, and to a lesser extent, Wollongong, if this can be sustained over time.

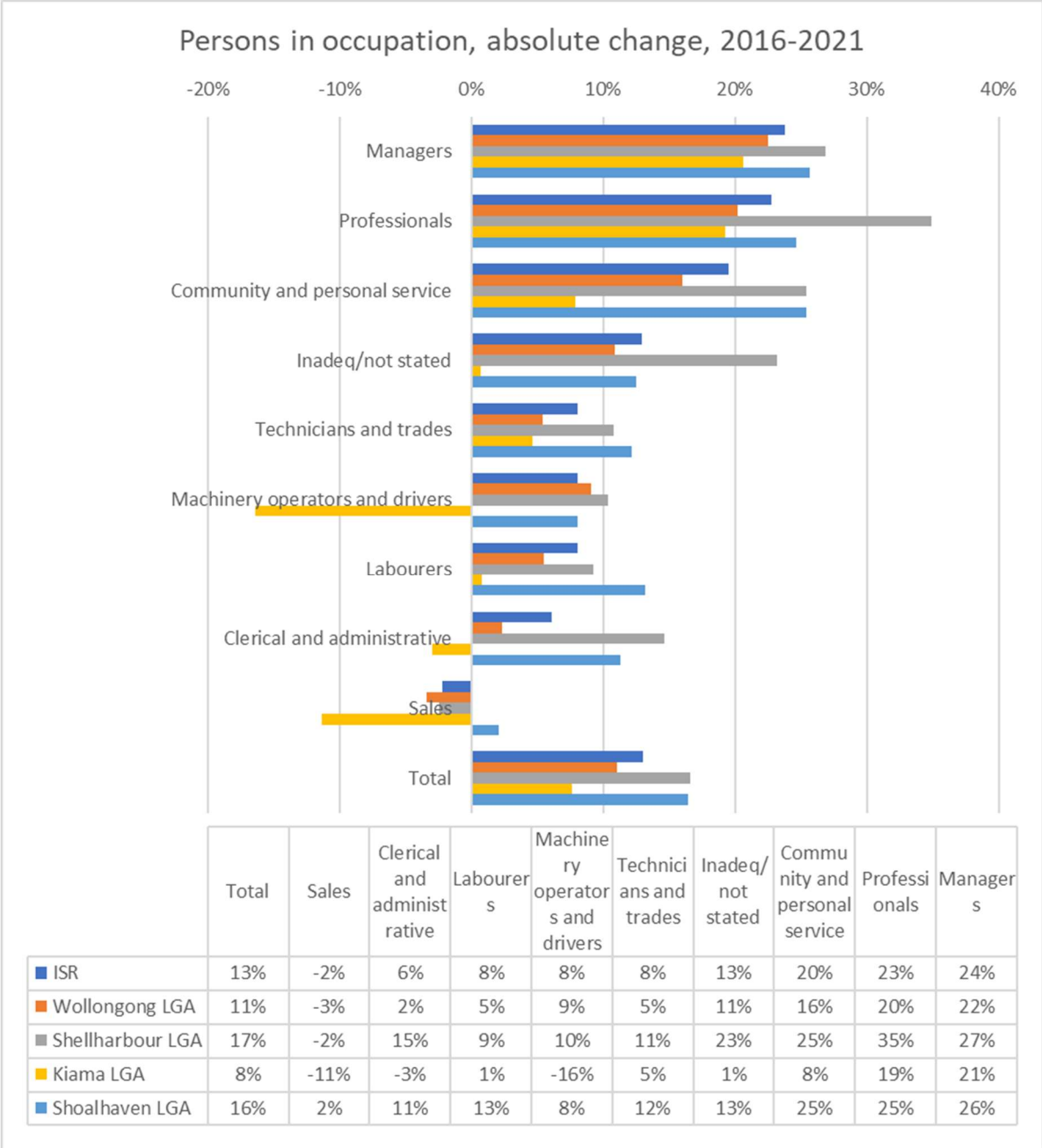


Figure 0-58: Occupation Profile ISR LGAs: absolute % change ISR 2016-21

Source: JSA 2022, derived from ABS 2021 Census, TableBuilder Pro

Table 0.4: Occupation, 2016, 2021, and change (number) between 2016 and 2021, by LGA

Occupation	Year	Wollongong	Shellharbour	Kiama	Shoalhaven
Professionals	2016	20,486	4,211	2,434	6,125
	2021	24,620	5,682	2,902	7,636
	Change	+4,134	+1,471	+468	+1,511
Technicians and trades	2016	13,055	5,190	1,425	6,250
	2021	13,766	5,750	1,491	7,012
	Change	+711	+560	+66	+762
Community and personal service	2016	10,922	3,884	1,145	5,026
	2021	12,667	4,871	1,235	6,305
	Change	+1,745	+987	+90	+1,279
Clerical and administrative	2016	12,000	3,982	1,150	4,139
	2021	12,282	4,564	1,116	4,607
	Change	+282	+582	-34	+468
Managers	2016	9,244	2,681	1,358	4,209
	2021	11,323	3,402	1,638	5,288
	Change	+2,079	+721	+280	+1,079
Labourers	2016	7,774	3,177	636	4,097
	2021	8,200	3,471	641	4,638
	Change	+426	+294	+5	+541
Sales	2016	7,934	3,330	721	3,901
	2021	7,663	3,247	639	3,983
	Change	-271	-83	-82	+82
Machinery operators and drivers	2016	5,465	2,673	476	1,971
	2021	5,962	2,951	398	2,130
	Change	+497	+278	-78	+159
Total employed persons	2016	88,251	29,606	9,488	36,330
	2021	98,020	34,522	10,213	42,293
	Change	+9,769	+4,916	+725	+5,963

Source: JSA 2022, derived from ABS (2021) Census, Basic Community Profiles, G56, and ABS (2016) Census, Basic Community Profiles, G53. Total of occupations does not equal total employed persons due to Inadequately Described/Not Stated responses.

### 1.10.6 Occupational Profile: Relative ('market share') Change 2016-21

#### Illawarra Shoalhaven Region

In terms of relative importance of different occupational groups, or 'market share', over time, the only occupations to increase in this regard at the regional scale were Managers, Professionals and Community and Personal Service workers, with all other occupations decreasing as a proportion of total employed people in the Region from 2016-21, as shown below.

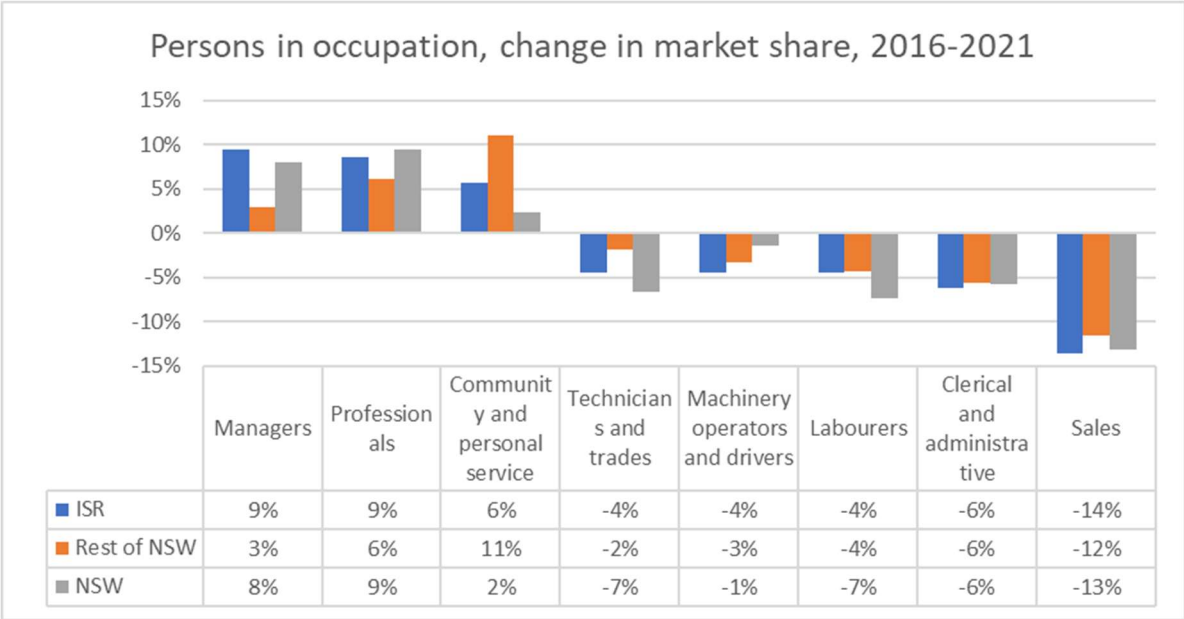


Figure 0-59: Occupation Profile ISR: relative change ('market share') ISR 2016-21

Source: JSA 2022, derived from ABS 2021 Census, TableBuilder Pro

#### Local Government Areas

A similar trend is apparent in the main three occupations to experience a growth in relative importance from 2016-21, with the exception of the decline in Community and Personal Service workers in Kiama LGA as a proportion of all workers; and a much higher relative rate of growth among Professionals in Shellharbour LGA.

The major decline in Machinery and Plant Operators, and Sales people in Kiama LGA, is also of note, as shown below.

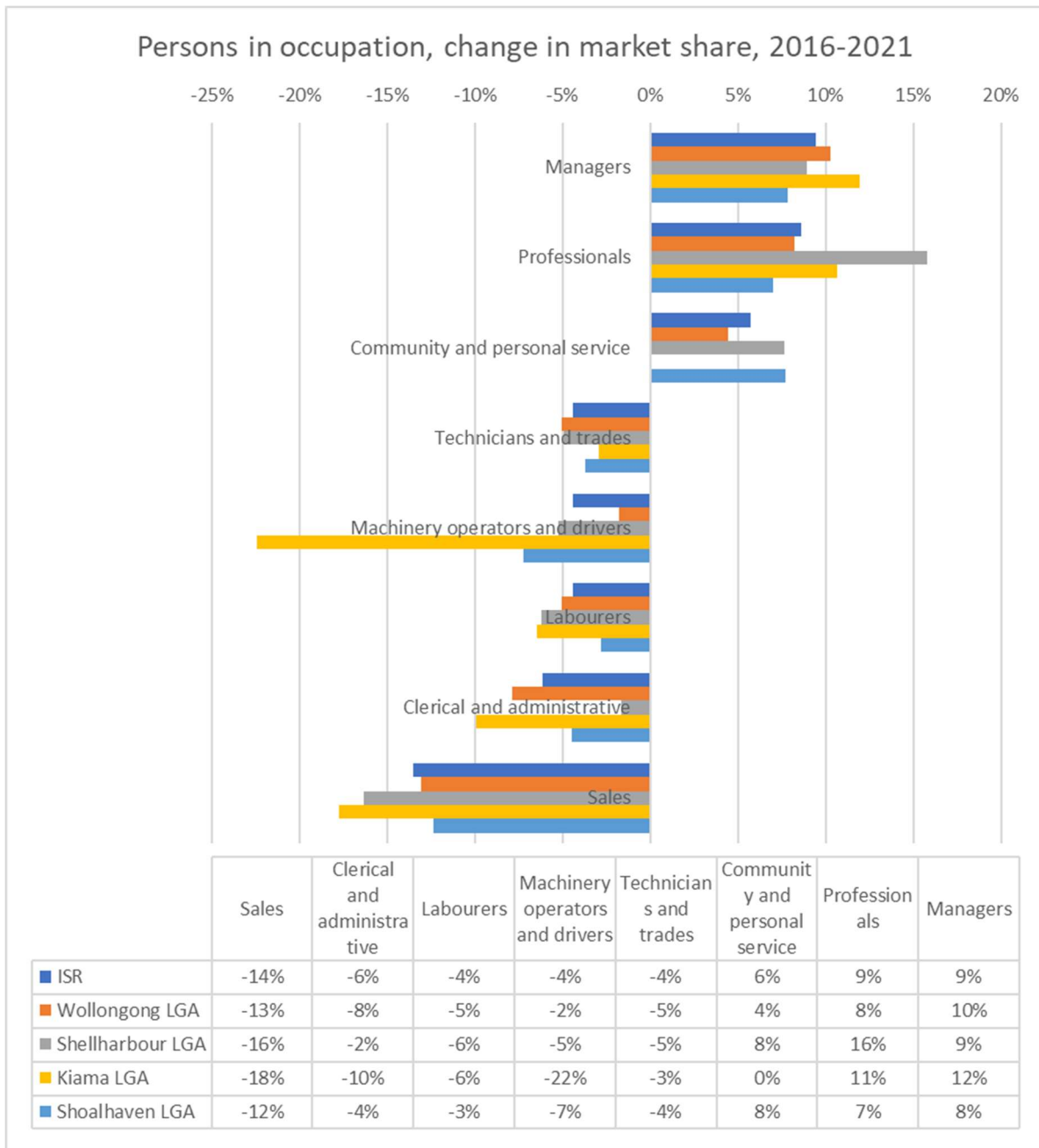


Figure 0-60: Occupation Profile ISR LGAs: relative change ('market share') ISR 2016-21

Source: JSA 2022, derived from ABS 2021 Census, TableBuilder Pro

## 1.11 Population projections

### 1.11.1 Overview

The DPE (2022) has prepared population, household and implied dwelling projections to provide a picture of the population of NSW as it may develop in the future based on available evidence. DPE notes that these projections represent possible demographic futures, and are not targets or a representation of Government intent. These are the most recently published projections, and have been revised to take into account recent demographic trends, including related to migration and population movement arising from the COVID 19 pandemic.

DPE notes that these projections are not intended to change current visions set out in the various Regional Plans or current local plans and strategies, including Local Housing Strategies. The projections provide a common framework across NSW Government to inform planning policy decisions around infrastructure and service delivery.<sup>3</sup>

### 1.11.2 Population projections 2021-2041

The DPE (2022) has prepared population, household and implied dwelling projections to provide a picture of the population of NSW as it may develop in the future based on available evidence. DPE notes that these projections represent possible demographic futures, and are not targets or a representation of Government intent. These are the most recently published projections, and have been revised to take into account recent demographic trends, including related to migration and population movement arising from the COVID 19 pandemic.

The table below shows population projections from 2021 to 2041 for the four LGAs of the Illawarra Shoalhaven and the combined Illawarra Shoalhaven City area. We note that ABS 2021 Census population counts differ somewhat to the DPE figures for 2021.

The population of the region is projected to grow by 30% over the 20-year period, ranging from a 26% increase in Wollongong LGA to 39% increase in Shellharbour LGA. The projected proportional increases in these areas are greater than Regional NSW and NSW, at 18% and 21% respectively.

Due to higher projected growth rates in Shellharbour and Shoalhaven, there is projected to be a slight redistribution of regional population toward these LGAs and away from Wollongong LGA.

Table 0.5: Population projections 2021 to 2041

	<b>2021</b>	<b>% of regional pop</b>	<b>2041</b>	<b>% of regional pop</b>	<b># pop change 2021-2041</b>	<b>% pop change 2021-2041</b>
Wollongong LGA	220,274	51%	276,936	50%	56,661	26%
Shellharbour LGA	75,684	18%	105,399	19%	29,715	39%
Kiama LGA	23,930	6%	30,847	6%	6,917	29%
Shoalhaven LGA	108,612	25%	145,527	26%	36,914	34%
<b>Illawarra-Shoalhaven City</b>	<b>428,500</b>	<b>100%</b>	<b>558,708</b>	<b>100%</b>	<b>130,208</b>	<b>30%</b>
Regional NSW	3,162,049	n/a	3,730,659	n/a	568,610	18%
<b>New South Wales Total</b>	<b>8,166,757</b>	<b>n/a</b>	<b>9,872,934</b>	<b>n/a</b>	<b>1,706,176</b>	<b>21%</b>

Source: DPE 2022 NSW Common Planning Assumption Projections; JSA 2022.

<sup>3</sup> DPE 2022 NSW Common Planning Assumption Projections, Greater Cities Commission Six Cities Projections for year ending 30 June, Notes. Data accessed online <https://www.planning.nsw.gov.au/Research-and-Demography/Population-Projections/Explore-the-data>

### 1.11.3 Age profile projections 2021-2041

#### Regional Projected Change

The Region is projected to have higher than average growth amongst children and young people aged **0-19 years**, with all LGAs projected to have above average growth in this cohort, to a greater or lesser extent.

There is also projected to be higher than average regional growth among those aged **20-29 years**, although this is led by much higher than average growth in Wollongong LGA, with its student and young adult population, and relatively low growth in Kiama and Shoalhaven over the period.

There is also projected to be a slightly higher than average rate of **30-39 year olds**, and a slightly lower than average rate of **40-49 year olds** at the regional level, although again with some variability across the LGAs.

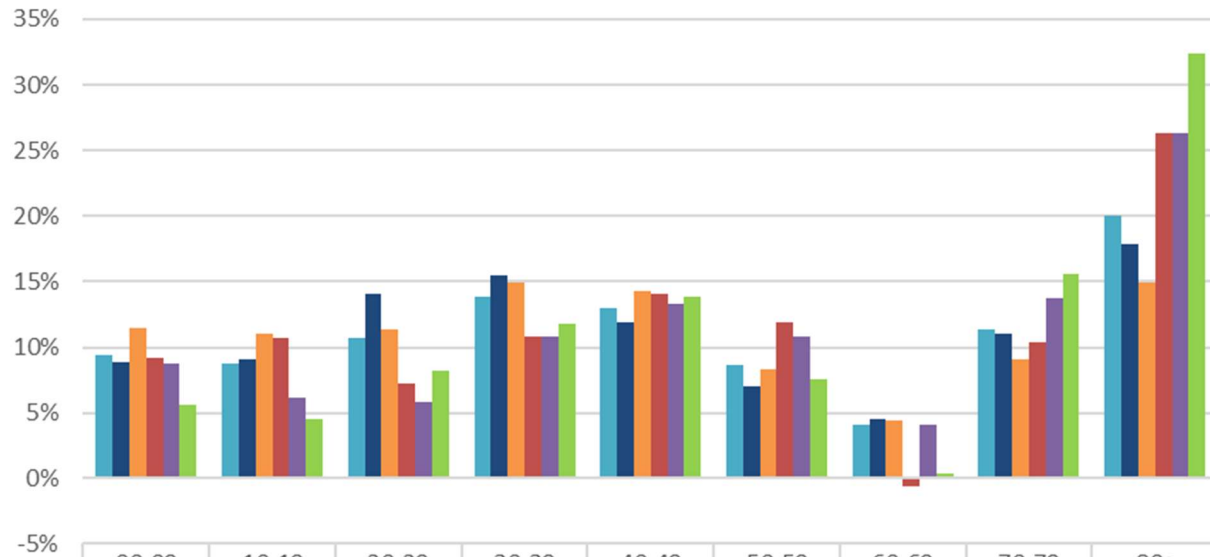
Overall, there is a higher than average increase in those aged **50-69 years** in the Region, although Kiama is quite different in this regard, with a decline in those aged **60-69 years** over the period.

Around 20% of projected population growth across the Region is among those aged **80+ years**. Whilst this considerable growth among the oldest age groups, it is well below Regional NSW where 32% of projected population growth is among those aged 80+. This change is particularly pronounced in the Kiama and Shoalhaven LGAs where 26% of the projected population growth to 2041 is among those aged 80+ years.

The Region and all LGAs also had a lower than average increase in those aged **70-79 years** to 2041. Thus, although aging of the population is likely to be a key feature of demographic change in the Region and constituent LGAs, it is unlikely to be as prominent as it will be for regional NSW as a whole.

This is shown in the **graph below**, with more detailed trends for each of the four constituent LGAs shown in the **graphs that follow**.

% of total projected population change 2021-2041 by age group,  
4 LGAs, Illawarra-Shoalhaven City & Regional NSW



	00-09	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80+
Illawarra-Shoalhaven City % of total projected change	9%	9%	11%	14%	13%	9%	4%	11%	20%
Wollongong LGA % of total projected change	9%	9%	14%	15%	12%	7%	5%	11%	18%
Shellharbour LGA % of total projected change	11%	11%	11%	15%	14%	8%	4%	9%	15%
Kiama LGA % of total projected change	9%	11%	7%	11%	14%	12%	-1%	10%	26%
Shoalhaven LGA % of total projected change	9%	6%	6%	11%	13%	11%	4%	14%	26%
Regional NSW % of total pop projected change	6%	5%	8%	12%	14%	8%	0%	16%	32%

Figure 0-61: Proportion of projected population change 2021-2041 by age group, 4 LGAs and Illawarra-Shoalhaven City

Source: JSA, 2022; DPE 2022.

## Wollongong LGA

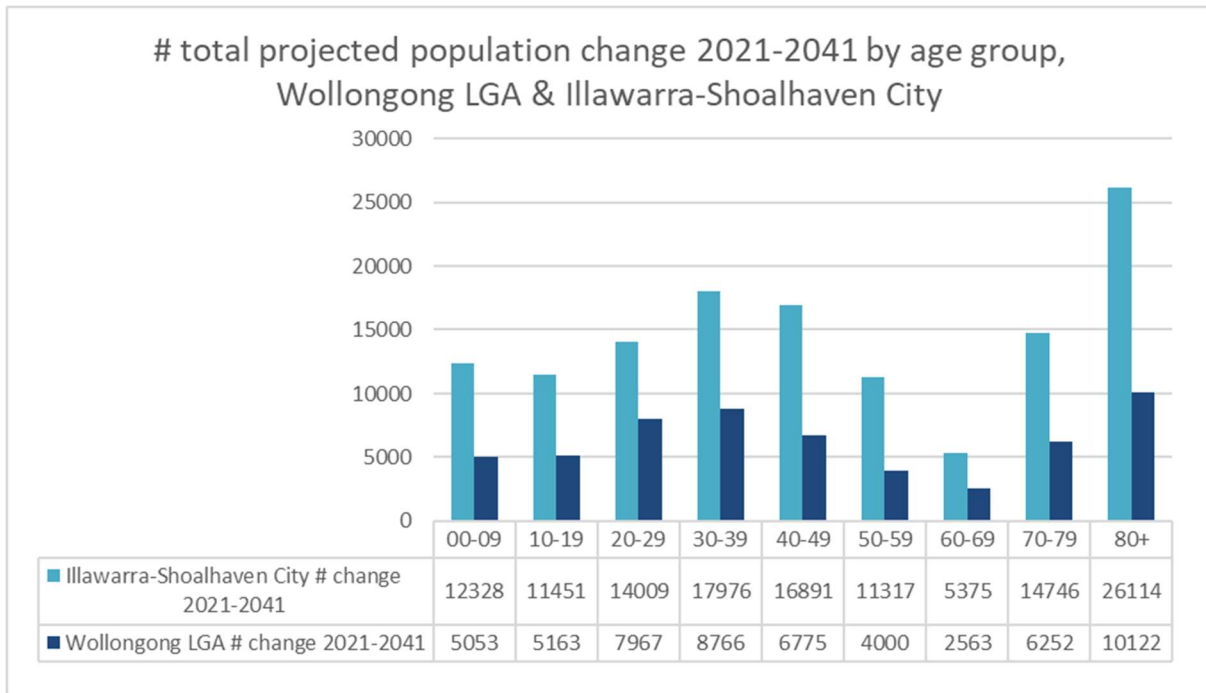


Figure 0-62: Projected population growth (#) by age group 2021-2041, Wollongong LGA & Illawarra-Shoalhaven City

Source: JSA, 2022; DPE 2022.

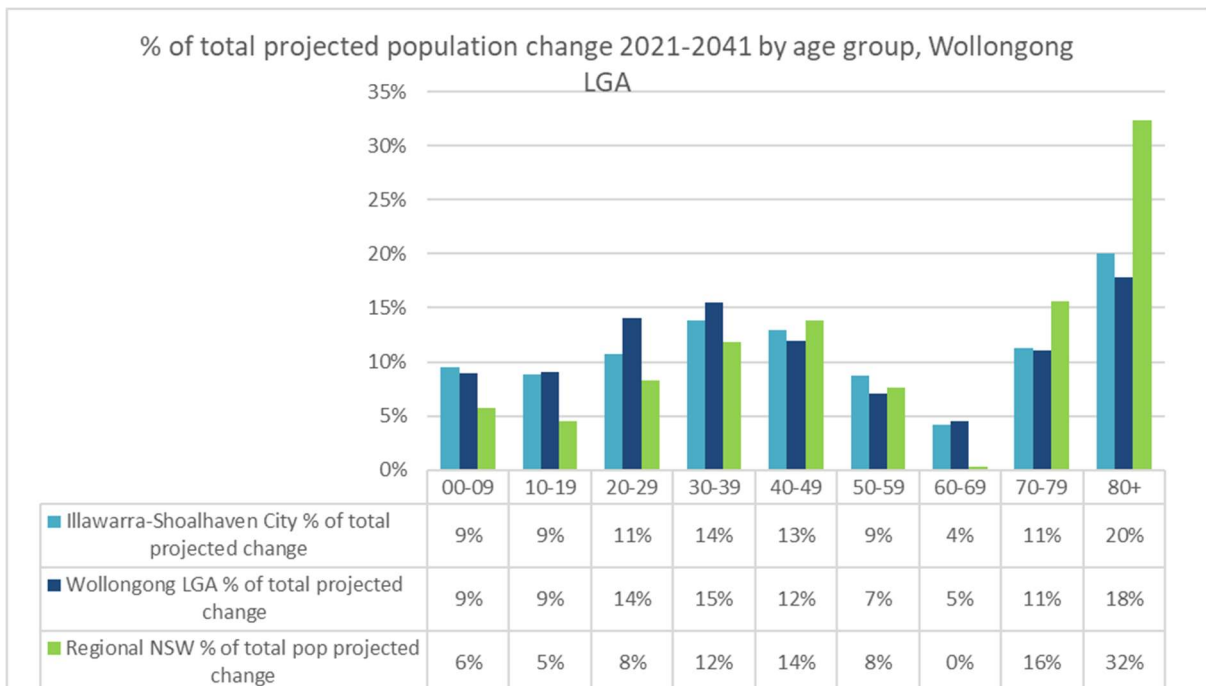


Figure 0-63: % of projected population growth by age group 2021-2041, Wollongong LGA, Illawarra-Shoalhaven City & Regional NSW

Source: JSA, 2022; DPE 2022.



## Shellharbour LGA

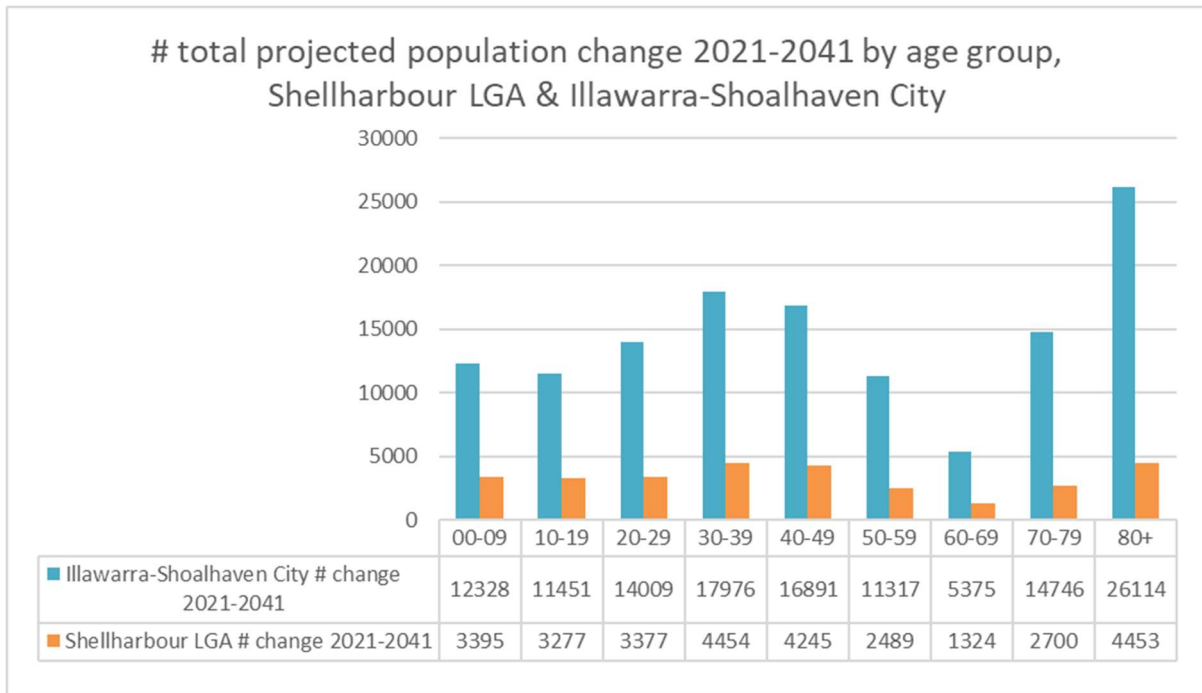


Figure 0-64: Projected population growth (#) by age group 2021-2041, Shellharbour LGA & Illawarra-Shoalhaven City

Source: JSA, 2022; DPE 2022.

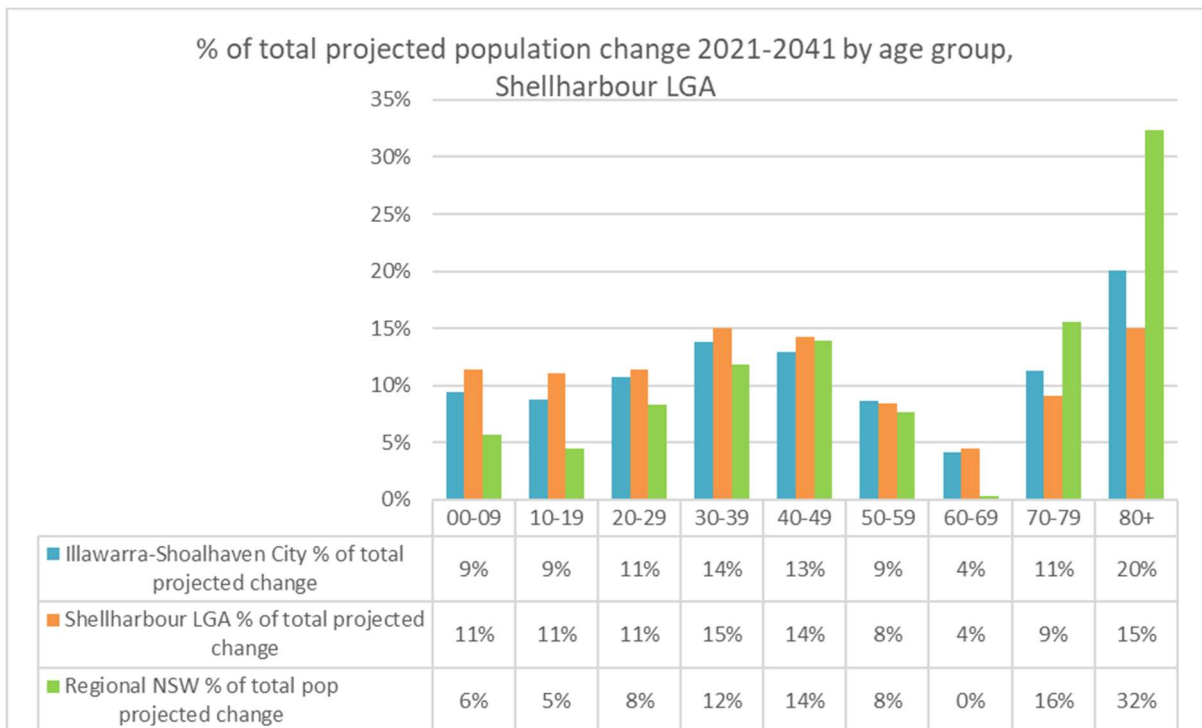


Figure 0-65: % of projected population growth by age group 2021-2041, Shellharbour LGA, Illawarra-Shoalhaven City & Regional NSW

Source: JSA, 2022; DPE 2022.

## Kiama LGA

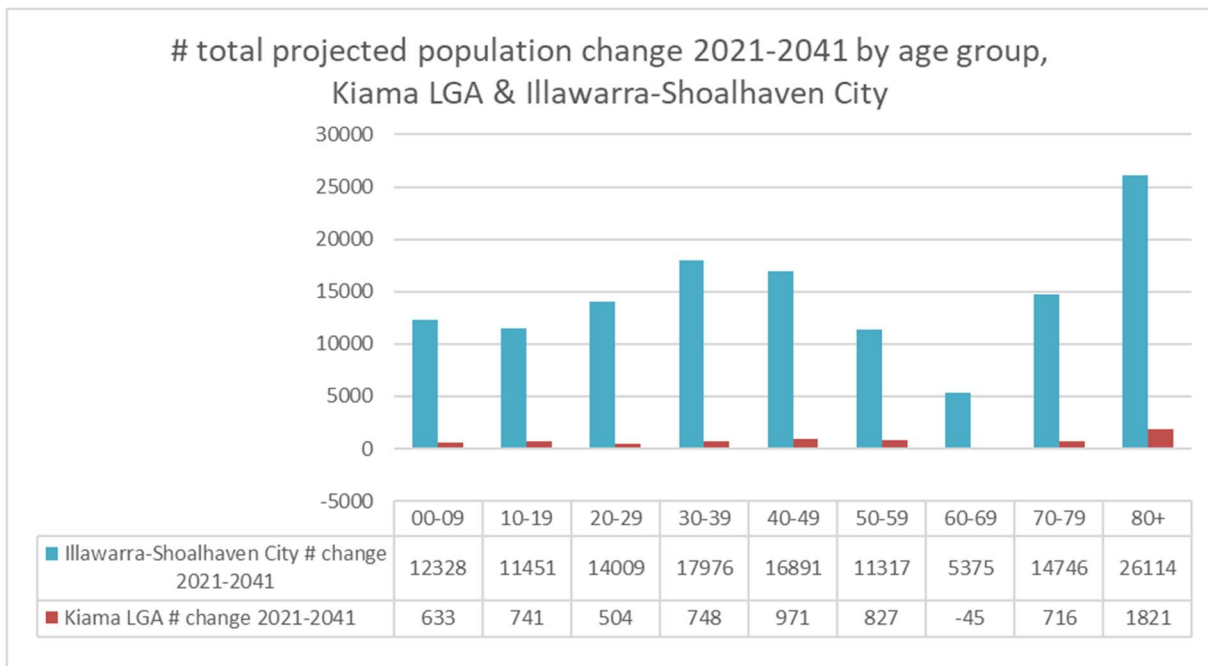


Figure 0-66: Projected population growth (#) by age group 2021-2041, Kiama LGA & Illawarra-Shoalhaven City

Source: JSA, 2022; DPE 2022.

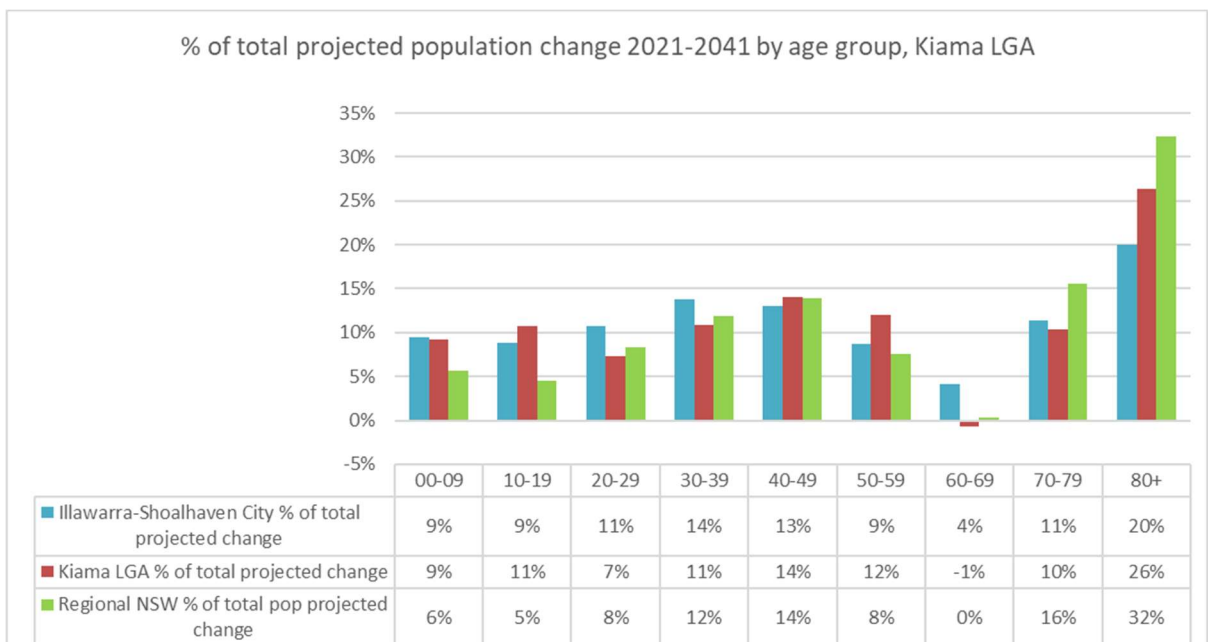


Figure 0-67: % of projected population growth by age group 2021-2041, Kiama LGA, Illawarra-Shoalhaven City & Regional NSW

Source: JSA, 2022; DPE 2022.

## Shoalhaven LGA

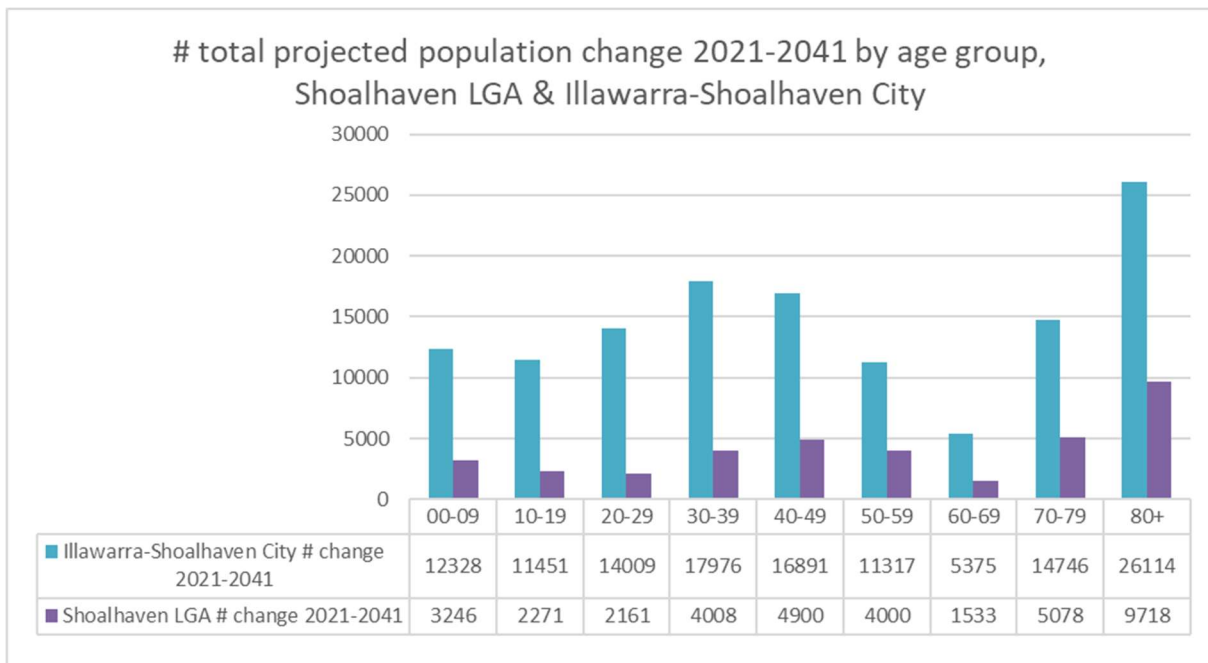


Figure 0-68: Projected population growth (#) by age group 2021-2041, Shoalhaven LGA & Illawarra-Shoalhaven City

Source: JSA, 2022; DPE 2022.

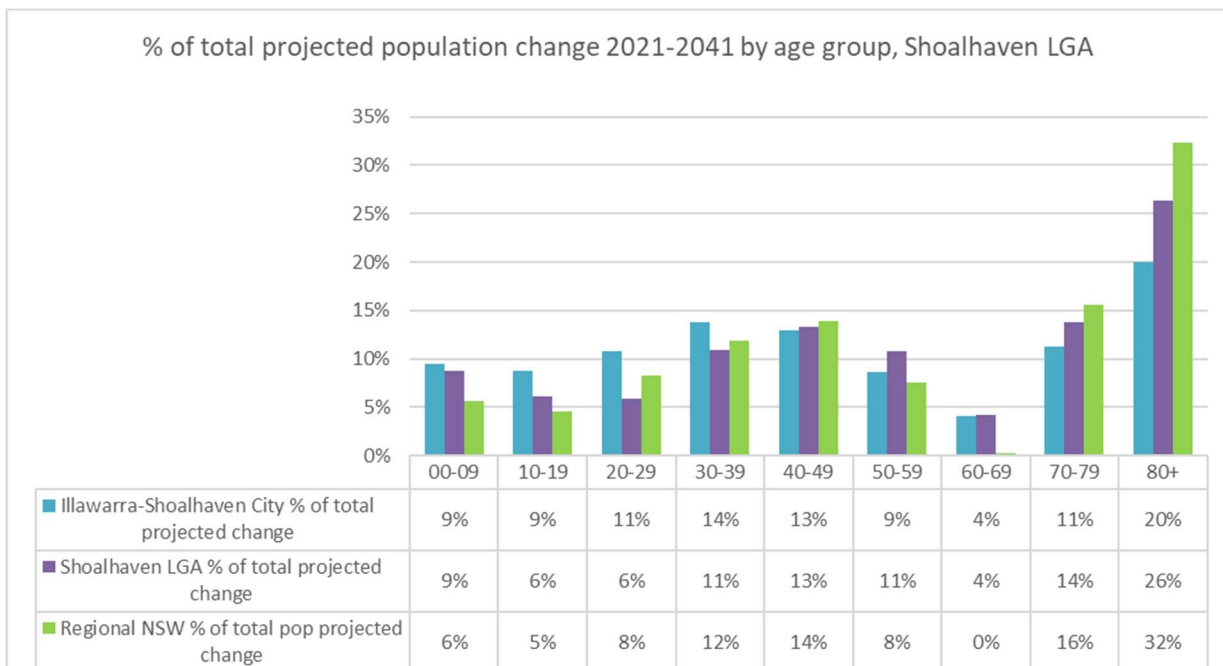


Figure 0-69: % of projected population growth by age group 2021-2041, Shoalhaven LGA, Illawarra-Shoalhaven City & Regional NSW

Source: JSA, 2022; DPE 2022.

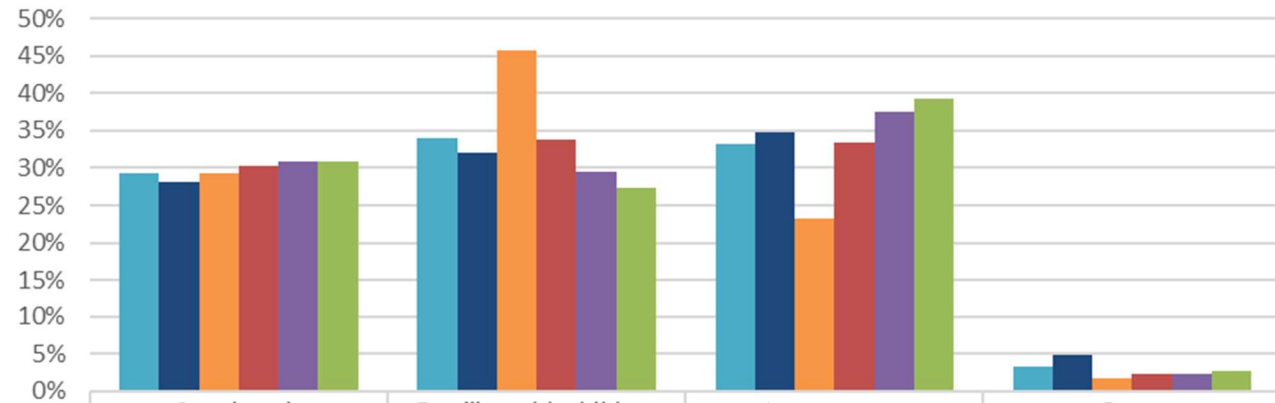
#### 1.11.4 Household type projections 2021-2041

In line with the age projections above, the Region as a whole is projected to have quite different projected growth in household types compared with regional NSW. In particular, the Region is projected to have a much higher than average rate of growth in **families with children**, and a much lower than average rate of growth in **lone person households** by 2041.

**Shellharbour LGA** is projected to have a particularly high rate of growth in families with children, and a very low relative rate of growth among lone person households, as shown in the graph below.

This is followed by more detailed trends for each of the four constituent LGAs shown in the **graphs that follow**.

### % of projected household change by type 2021-2041, 4 LGAs, Illawarra-Shoalhaven City and Regional NSW



	Couple only	Families with children	Lone person	Group
■ Illawarra-Shoalhaven City % of total hh projected change	29%	34%	33%	3%
■ Wollongong LGA % of total hh projected change	28%	32%	35%	5%
■ Shellharbour LGA % of total hh projected change	29%	46%	23%	2%
■ Kiama LGA % of total hh projected change	30%	34%	33%	2%
■ Shoalhaven LGA % of total hh projected change	31%	29%	37%	2%
■ Regional NSW % of total hh projected change	31%	27%	39%	3%

Figure 0-70: Proportion of projected household change by type 2021-2041 for 4 LGAs, Illawarra-Shoalhaven City and Regional NSW

Source: JSA, 2022; DPE 2022

## Wollongong LGA

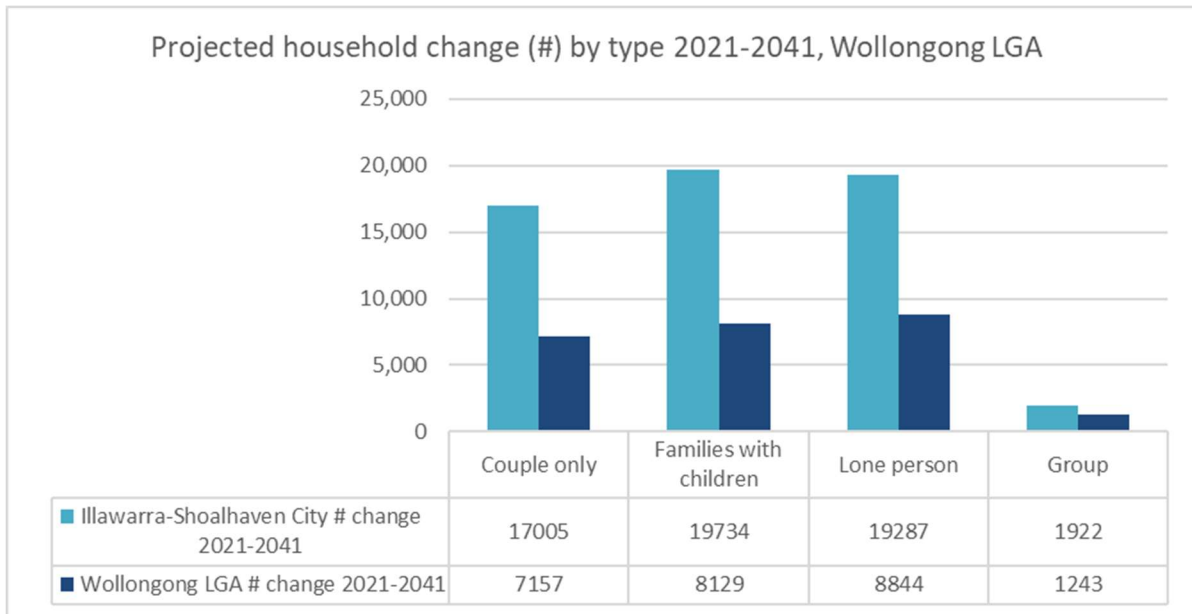


Figure 0-71: Projected household growth (#) by type 2021-2041, Wollongong LGA & Illawarra-Shoalhaven City

Source: JSA, 2022; DPE 2022

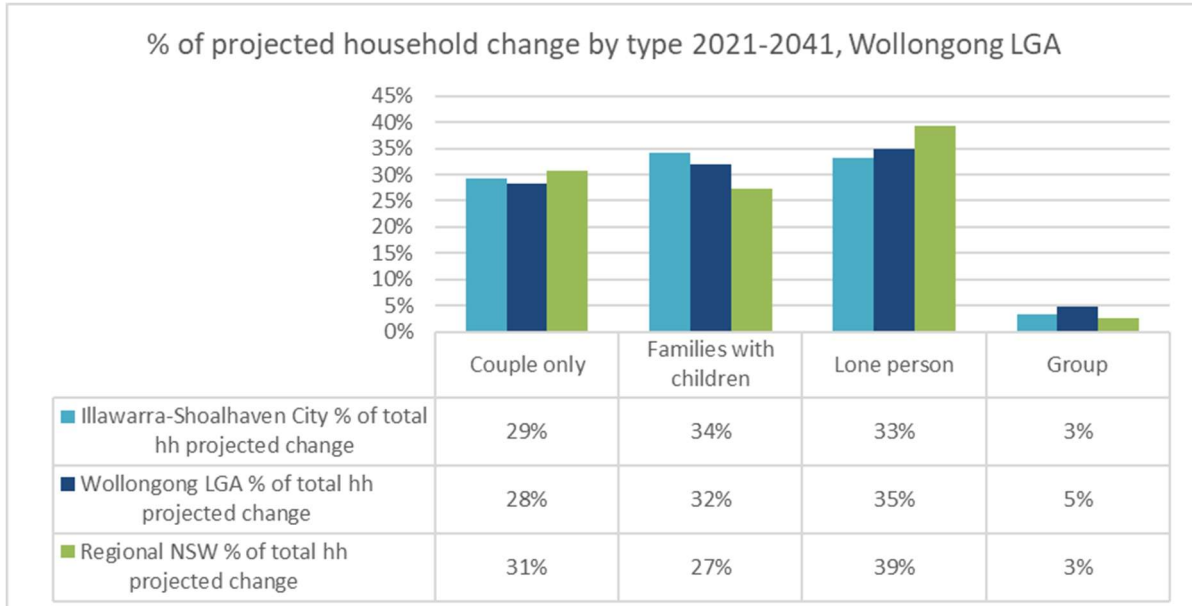


Figure 0-72: % of projected household growth by type 2021-2041, Wollongong LGA, Illawarra-Shoalhaven City & Regional NSW

Source: JSA, 2022; DPE 2022

## Shellharbour LGA

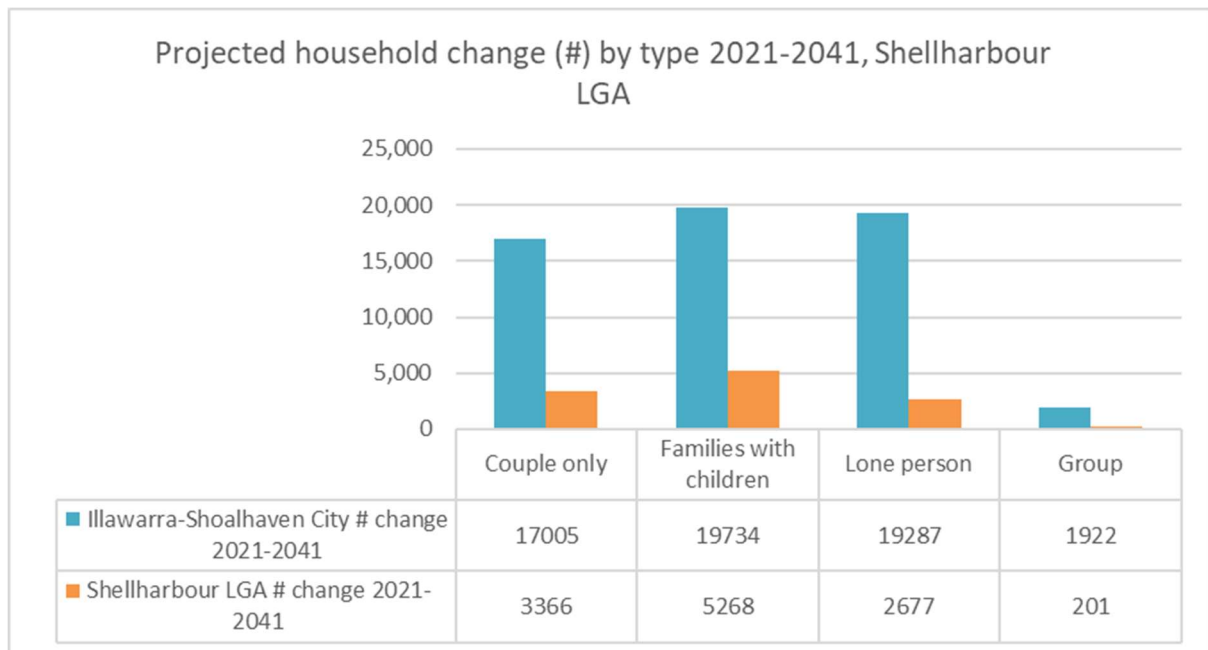


Figure 0-73: Projected household growth (#) by type 2021-2041, Shellharbour LGA & Illawarra-Shoalhaven City

Source: JSA, 2022; DPE 2022

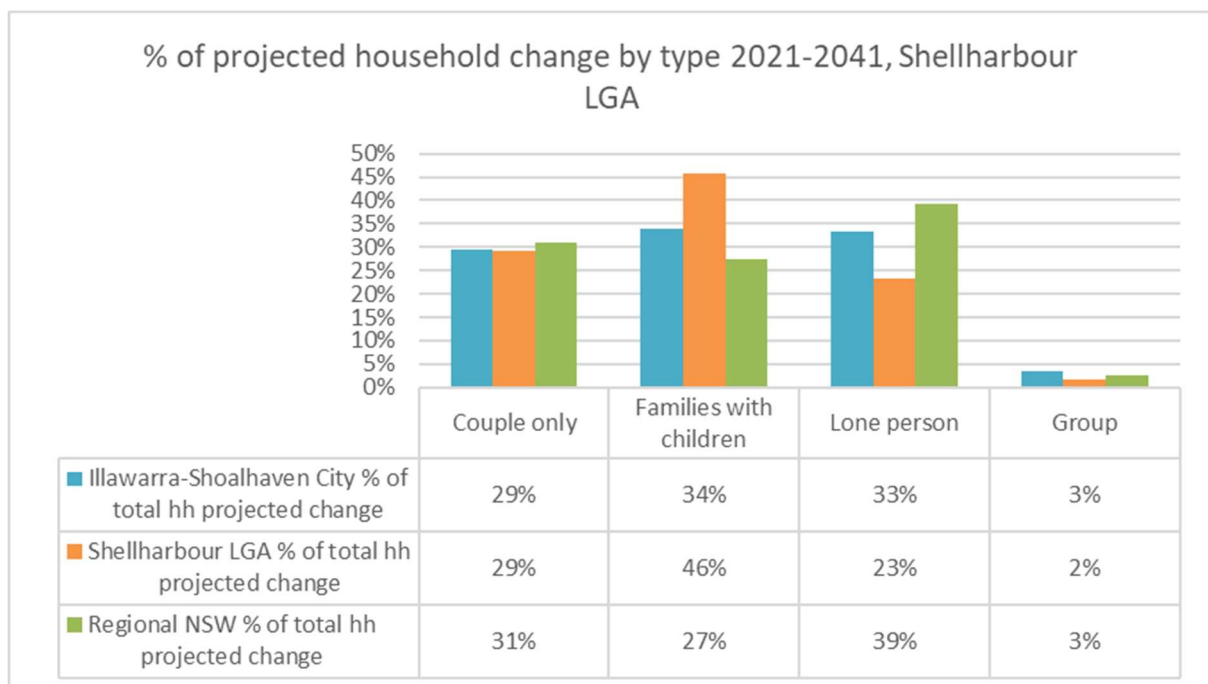


Figure 0-74: % of projected household growth by type 2021-2041, Shellharbour LGA, Illawarra-Shoalhaven City & Regional NSW

Source: JSA, 2022; DPE 2022

Kiama LGA

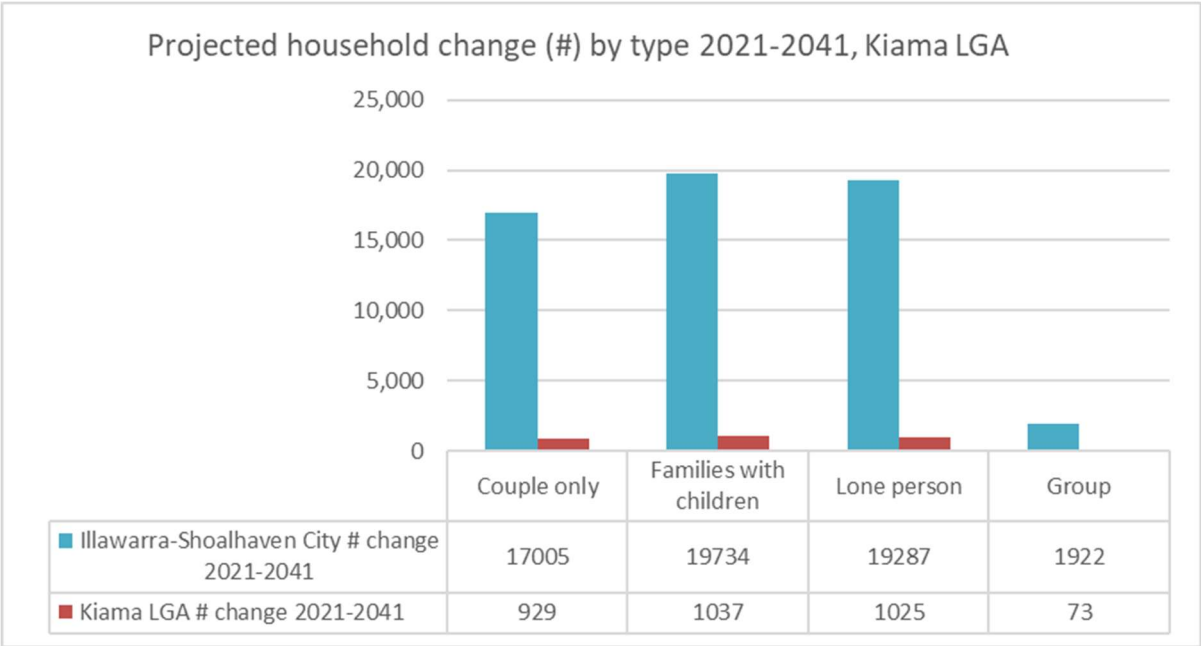


Figure 0-75: Projected household growth (#) by type 2021-2041, Kiama LGA & Illawarra-Shoalhaven City

Source: JSA, 2022; DPE 2022

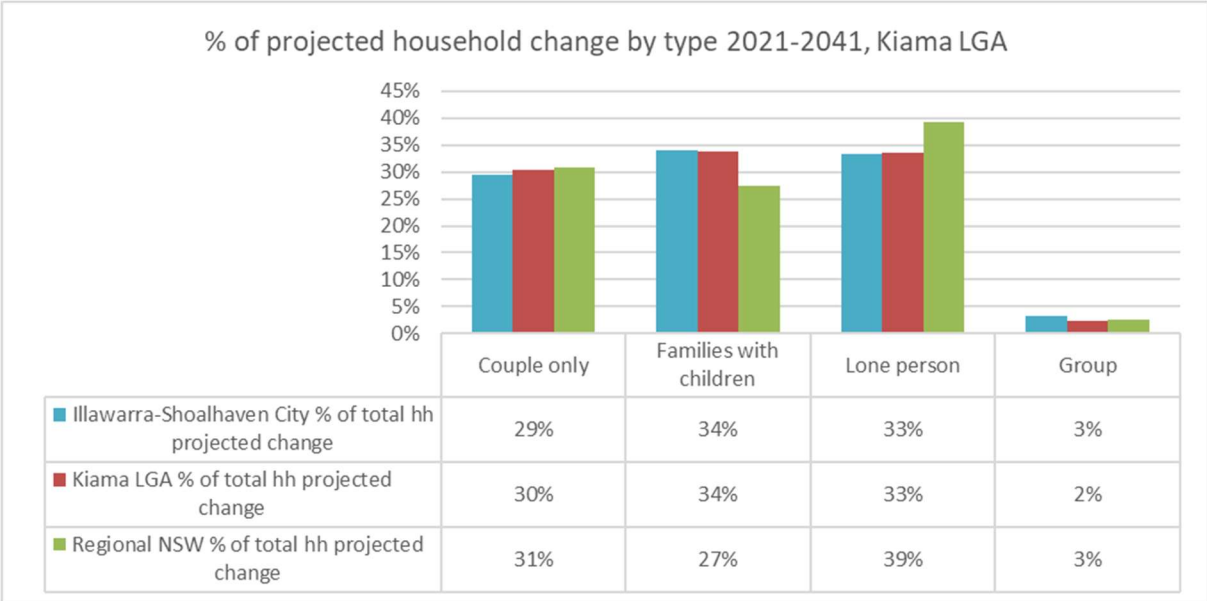


Figure 0-76: % of projected household growth by type 2021-2041, Kiama LGA, Illawarra-Shoalhaven City & Regional NSW

Source: JSA, 2022; DPE 2022



## Shoalhaven LGA

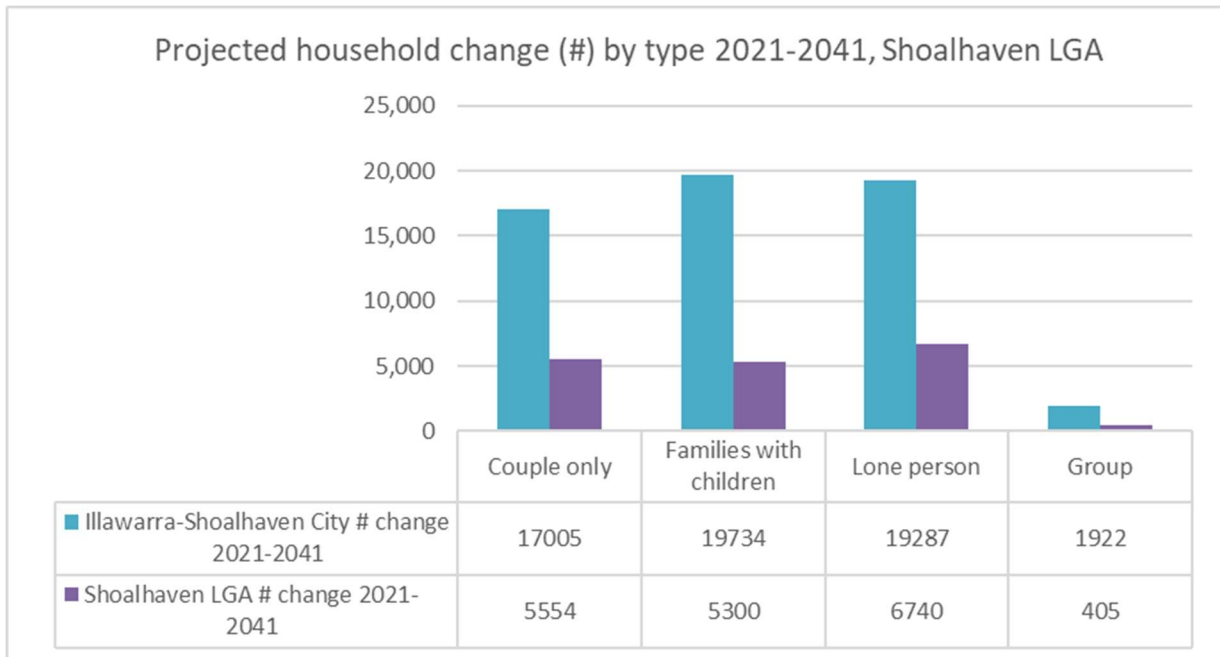


Figure 0-77: Projected household growth (#) by type 2021-2041, Shoalhaven LGA & Illawarra-Shoalhaven City

Source: JSA, 2022; DPE 2022

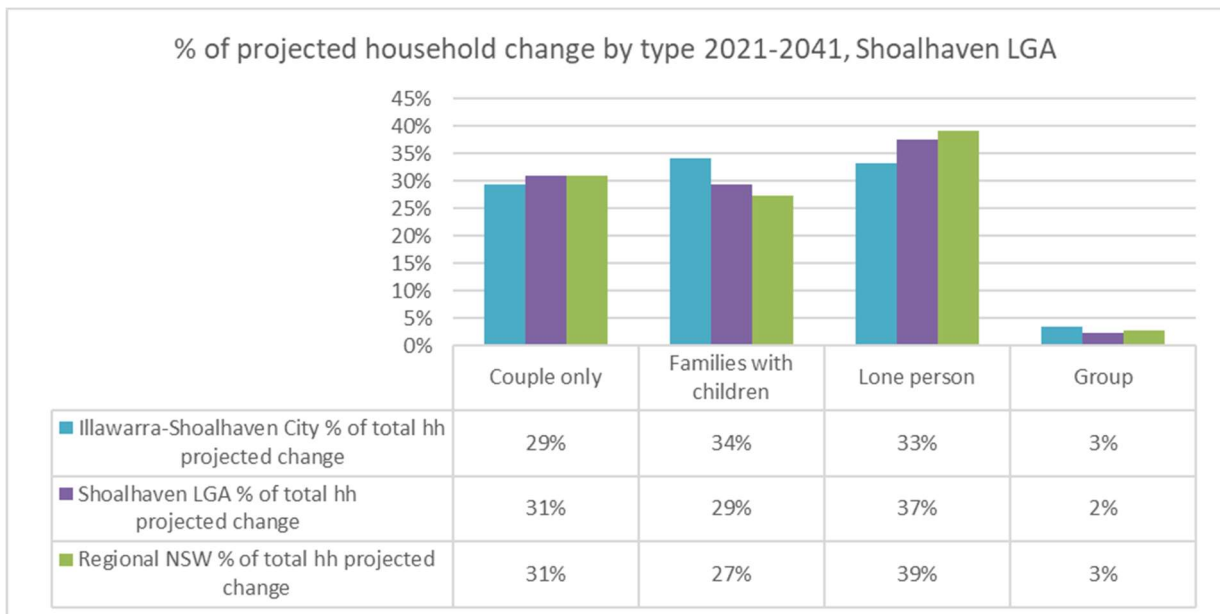


Figure 0-78: % of projected household growth by type 2021-2041, Shoalhaven LGA, Illawarra-Shoalhaven City & Regional NSW

Source: JSA, 2022; DPE 2022

### 1.11.5 Implied dwelling projections 2021-2041

In terms of projected additional dwellings, the Region is projected to have an additional 67,670 dwellings by 2041, and increase of 34%. This is higher than population growth (30%) likely accounting for a component of unoccupied private dwellings.

Wollongong and Shoalhaven are projected to make largest contributions to implied dwelling projections to 2041 in absolute terms - 40% of the Region's projected growth in dwellings in Wollongong LGA, and 36% of the Region's projected growth in dwellings in Shoalhaven LGA (three-quarters of the Region's projected growth).

However, there is a higher than average rate of growth in Shellharbour and Shoalhaven LGAs relative to their existing dwellings (for example, a 41% growth in the number of existing dwellings), as shown below.

Table 0.6: Implied dwelling projections 2021 to 2041

	2021	2041	# dw change 2021-2041	% dw change 2021-2041
Wollongong LGA	93,310	120,649	27,339	29%
Shellharbour LGA	29,962	42,182	12,220	41%
Kiama LGA	11,676	15,447	3,771	32%
Shoalhaven LGA	62,646	86,985	24,339	39%
Illawarra- Shoalhaven City	197,594	265,264	67,670	34%
Regional NSW	1,481,686	1,815,626	333,940	23%
<b>New South Wales Total</b>	<b>3,425,215</b>	<b>4,329,475</b>	<b>904,260</b>	<b>26%</b>

Source: DPE 2022 NSW Common Planning Assumption Projections; JSA 2022.

The dwelling share for the four LGAs, in absolute and proportional terms, is also shown in the graphs below.

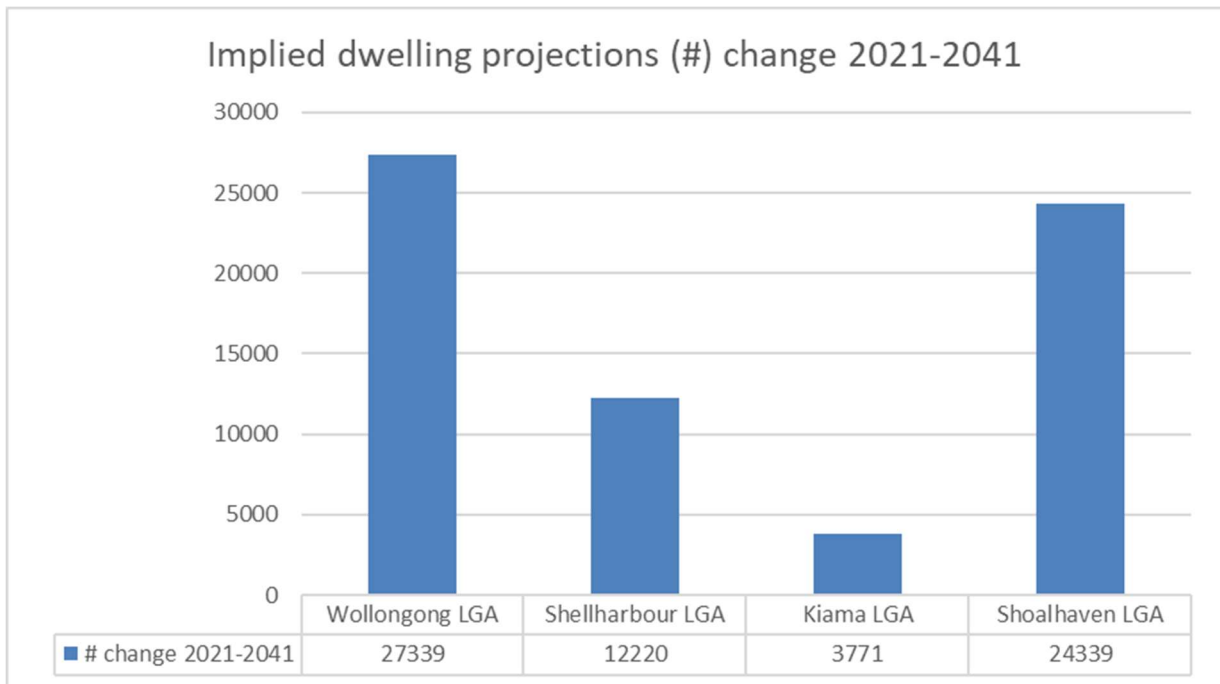


Figure 0-79: Implied dwelling projections (#) change 2021-2041 by LGA

Source: JSA, 2022; DPE 2022

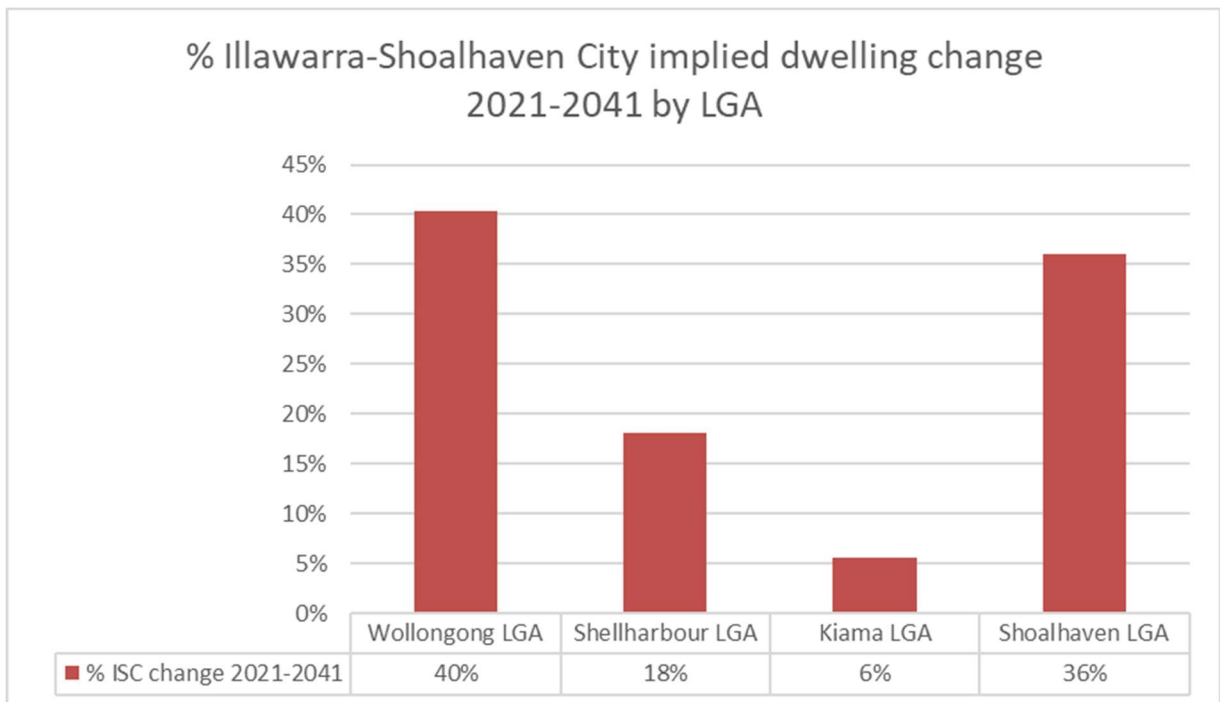


Figure 0-80: Proportion of Illawarra-Shoalhaven City implied dwelling projection 2021-2041 - dwelling share by LGA

Source: JSA, 2022; DPE 2022

## 1.12 Migration Trends

### 1.12.1 Overview

The following figures show migration trends for the five study areas from 2016 to 2021.

This section relies on Census respondents giving their place of residence five years ago. Around six percent of the people covered by the Census did not provide this. The findings in this section, therefore, should generally be taken as trends only.

### 1.12.2 Overall migration

For the Illawarra-Shoalhaven Region as a whole, between the 2016 and 2021 Censuses, 44,700 people moved into the region from other parts of Australia, and 34,600 people moved out of the region into other parts of Australia. The largest source of inward migration was Greater Sydney, at 26,000 people. The largest destination of outward migration was the balance of Australia, at 12,000 people.

Capital Region, Southern Highlands, and the balance of NSW had reasonably balanced inward and outward migration. Average turnover (inward and outward migration) was 7,000 for the balance of NSW, 1,100 for Southern Highlands, and 2,600 for Capital Region.

There was a large net inward migration from Greater Sydney, at 14,000 people. This comprised 26,000 people moving into the ISR, and 12,000 people moving out of the ISR.

Net outward migration to the balance of Australia was 4,600 people. This comprised 7,900 people moving in, and 12,500 people moving out.

In addition to the migration within Australia, 9,500 people moved into the ISR from overseas.

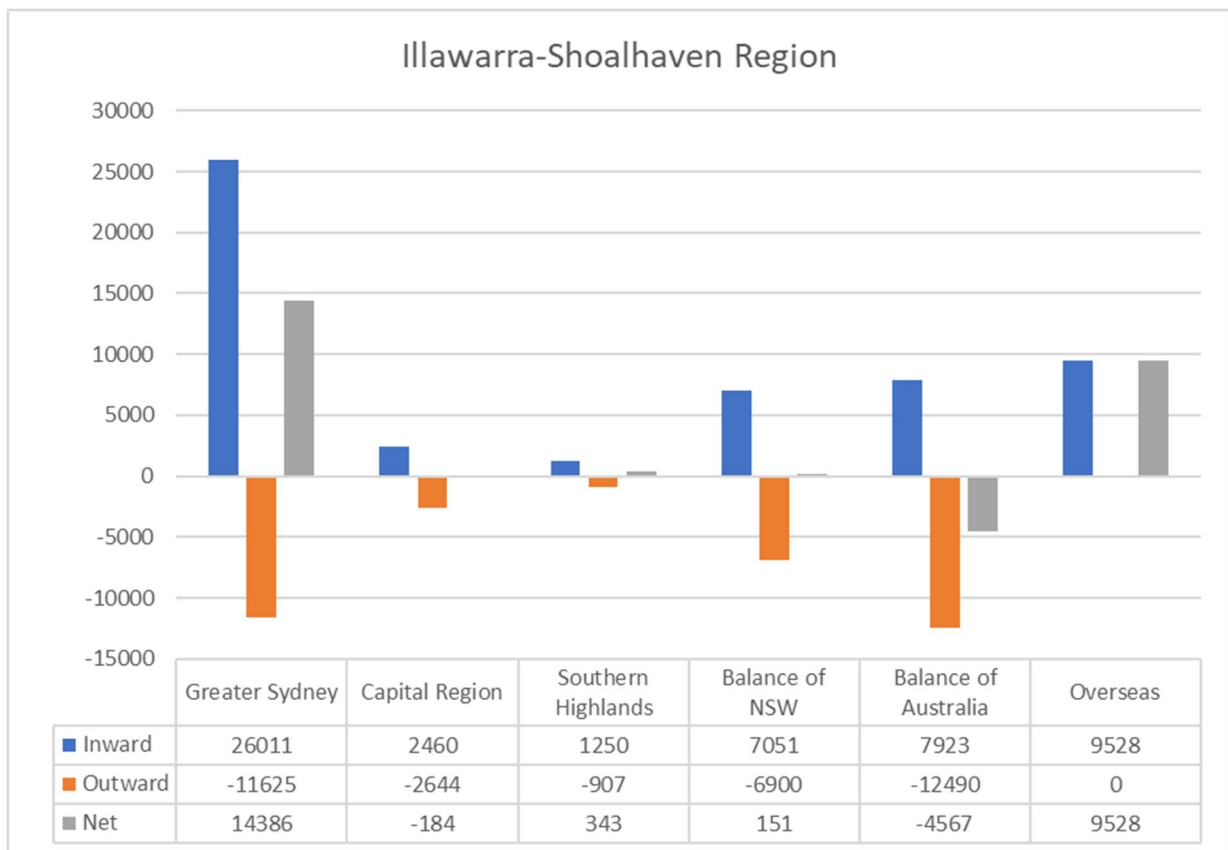
The number of people who moved overseas from the ISR is not captured by the Census. Thus, net migration to or from overseas is not comparable to net migration to or from the other areas.

Net migration into the ISR was 10,100 (not including overseas immigrants) or 19,700 (including overseas immigrants).

Considered each on their own, the five study areas tended to have high migration turnover with their neighbours. For example, Dapto – Port Kembla had high migration to and from Wollongong to the north and Shellharbour to the south. This effect was seen less in the southern study areas, with Kiama and Shoalhaven having their highest turnover with Greater Sydney. Shoalhaven, notably, had more than half again as much net migration from Greater Sydney as did Wollongong, and was the largest net destination of Greater Sydney residents of all the study areas.

Taken together, the data indicate that people from areas closer to Greater Sydney are displacing people from neighbouring areas that are further from Greater Sydney. People from Greater Sydney are moving into Wollongong. This displaces Wollongong residents into Dapto – Port Kembla. In turn, this displaces Dapto – Port Kembla residents into Shellharbour, and then Shellharbour residents into Shoalhaven. Kiama does not exhibit this “rolling” effect southwards from Greater Sydney, with a large net in-migration directly from Sydney, but a net out-migration northward to Shellharbour.

An apparent anomaly is that, while the ratio of in-migration to out-migration for each of the five areas considered individually ranges between 1.12 and 1.51, the same ratio for the ISR in aggregate is 1.57. This is due to out-migration overseas being unreported, which lack of reporting effects large areas more than small ones. If in-migration from overseas is excluded then the ratios of in-migration to out-migration drop to range between 1.02 and 1.39 for the five individual areas; the same ratio drops to 1.29 for the ISR in aggregate, which is within this range.



**Figure 0-81: Inward, outward, and net migration, Illawarra-Shoalhaven Region, 2016-2021**

Source: JSA 2022, based on ABS Census of Population and Housing 2021, persons, by place of usual residence at time of census and place of usual residence five years ago for selected SA3 and LGA areas.

## Wollongong

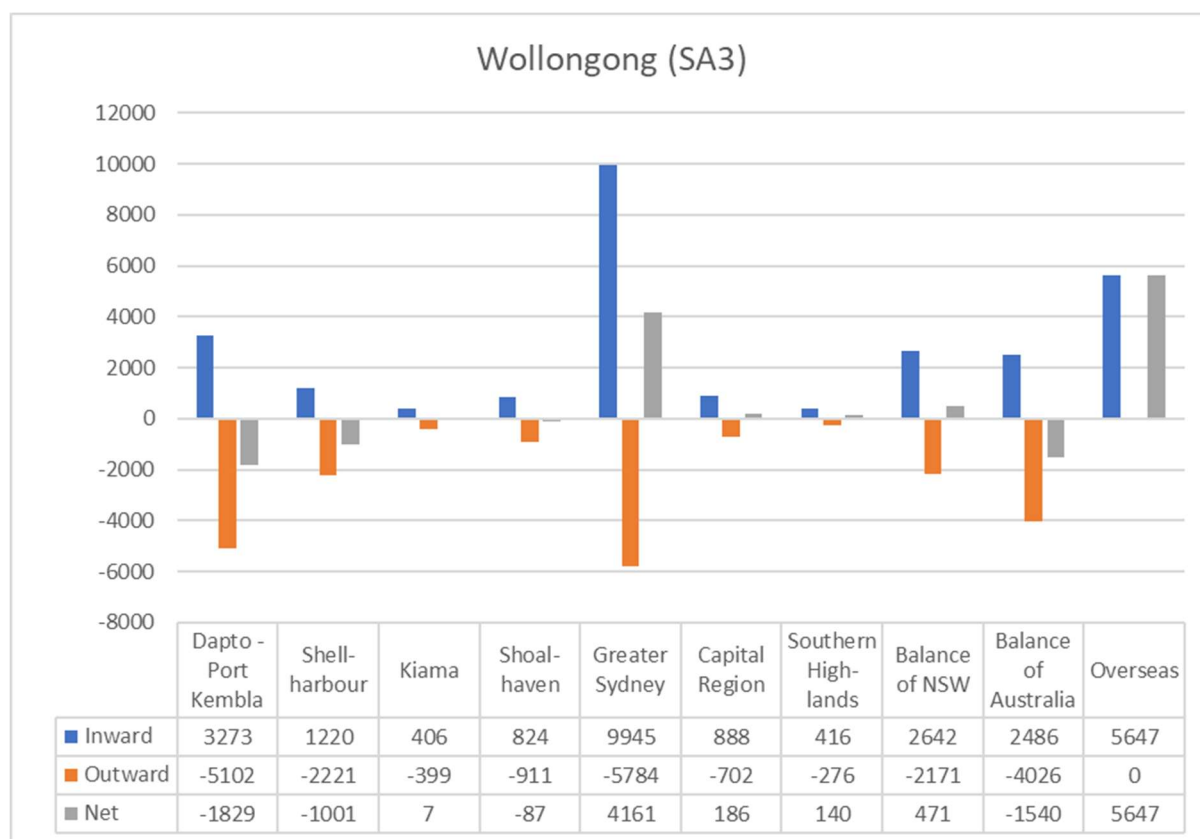
The greatest driver of migration in both directions for Wollongong SA3 was Greater Sydney. Between the 2016 and 2021 Censuses, 9,900 people came from Greater Sydney, and 5,800 people left for Greater Sydney.

Greater Sydney was the greatest domestic driver of net migration into or out of Wollongong, with a net 4,200 people moving to Wollongong from Greater Sydney. The larger overseas net migration is not comparable, as noted earlier.

There was a net inward movement of people from the balance of NSW (500 people).

There was a net outward movement of people to Dapto – Port Kembla (1,800 people), Shellharbour (1,000 people), and the balance of Australia (1,500 people).

Net migration to or from Kiama, Shoalhaven, Capital Region, and the Southern Highlands was fewer than 200 people in each case.



**Figure 0-82: Inward, outward, and net migration, Wollongong SA3, 2016-2021**

Source: JSA 2022, based on ABS Census of Population and Housing 2021, persons, by place of usual residence at time of census and place of usual residence five years ago for selected SA3 and LGA areas.

## Dapto – Port Kembla

The greatest source of migration into Dapto – Port Kembla SA3 was Wollongong. Between 2016 and 2021, around 5,100 people from this area moved into Dapto – Port Kembla.

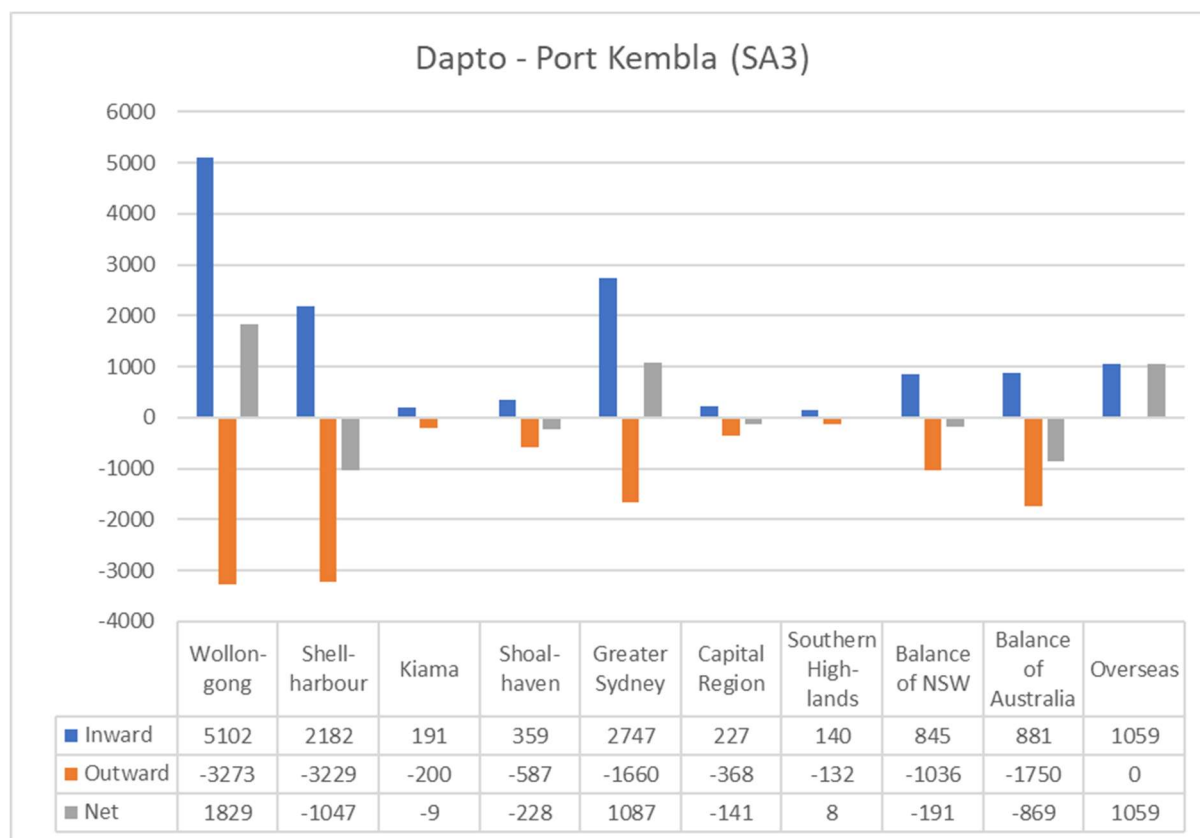
The greatest destination for migration out of Dapto – Port Kembla was Wollongong (3,300 people), followed closely by Shellharbour (3,200 people).

Wollongong was the greatest driver of net migration for Dapto – Port Kembla, with a net 4,200 people moving in from this area.

There was a net inward movement of people from Greater Sydney (1,100 people).

There was a net outward movement of people to Shellharbour (1,000 people), Shoalhaven (200 people), and the balance of Australia (800 people).

Net migration to or from Kiama, Capital Region, Southern Highlands, and the balance of NSW was fewer than 200 people in each case.



**Figure 0-83: Inward, outward, and net migration, Dapto – Port Kembla SA3, 2016-2021**

Source: JSA 2022, based on ABS Census of Population and Housing 2021, persons, by place of usual residence at time of census and place of usual residence five years ago for selected SA3 and LGA areas.

## Shellharbour

The greatest sources of migration into Shellharbour LGA were Greater Sydney (3,300 people) and Dapto – Port Kembla (3,200 people).

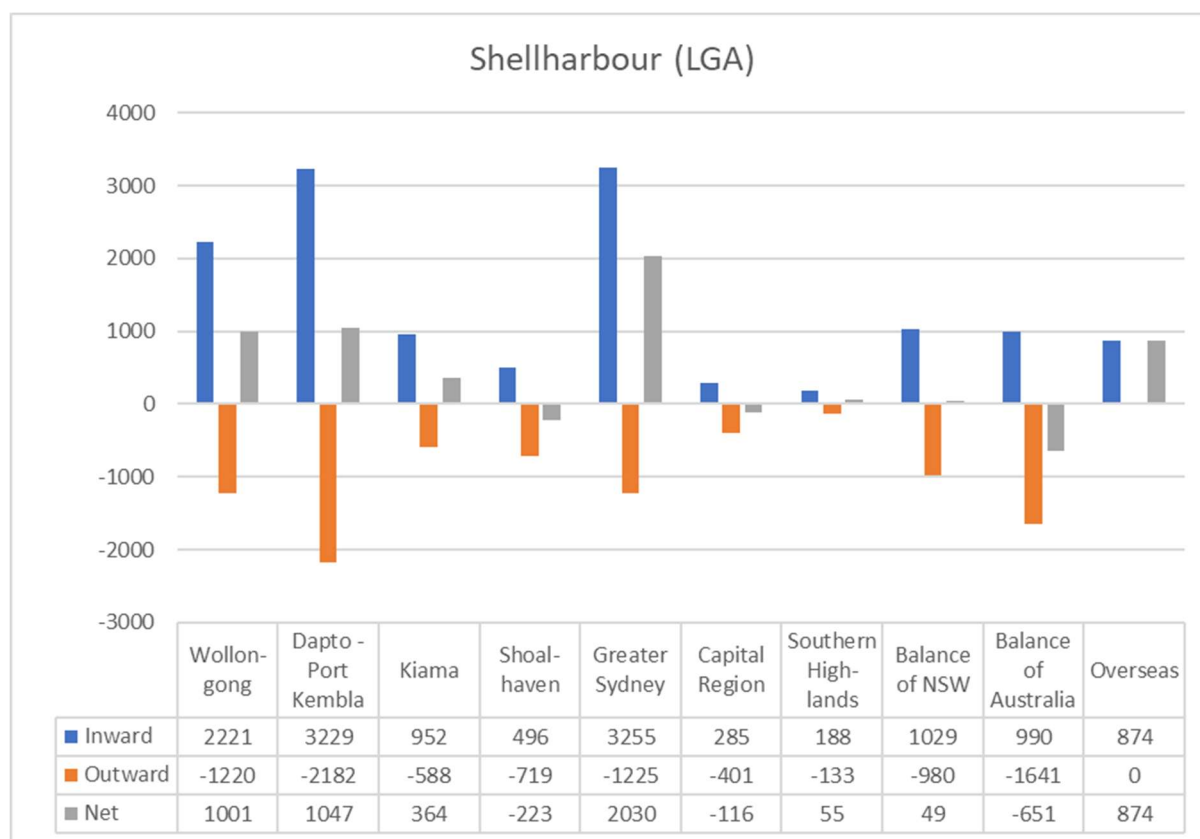
The greatest destination of migration out of Shellharbour was Dapto – Port Kembla, with 2,200 people departing for this area.

Greater Sydney was the greatest driver of net migration for Shellharbour. A net of 2,000 people moved into Shellharbour from this area.

There was a net inward movement of people from Wollongong (1,000 people), Dapto – Port Kembla (1,000 people), and Kiama (400 people).

There was a net outward movement of people to Shoalhaven (200 people), and the balance of Australia (700 people).

Net migration to or from Capital Region, Southern Highlands, and the balance of NSW was fewer than 200 people in each case.



**Figure 0-84: Inward, outward, and net migration, Shellharbour LGA, 2016-2021**

Source: JSA 2022, based on ABS Census of Population and Housing 2021, persons, by place of usual residence at time of census and place of usual residence five years ago for selected SA3 and LGA areas.



## Kiama

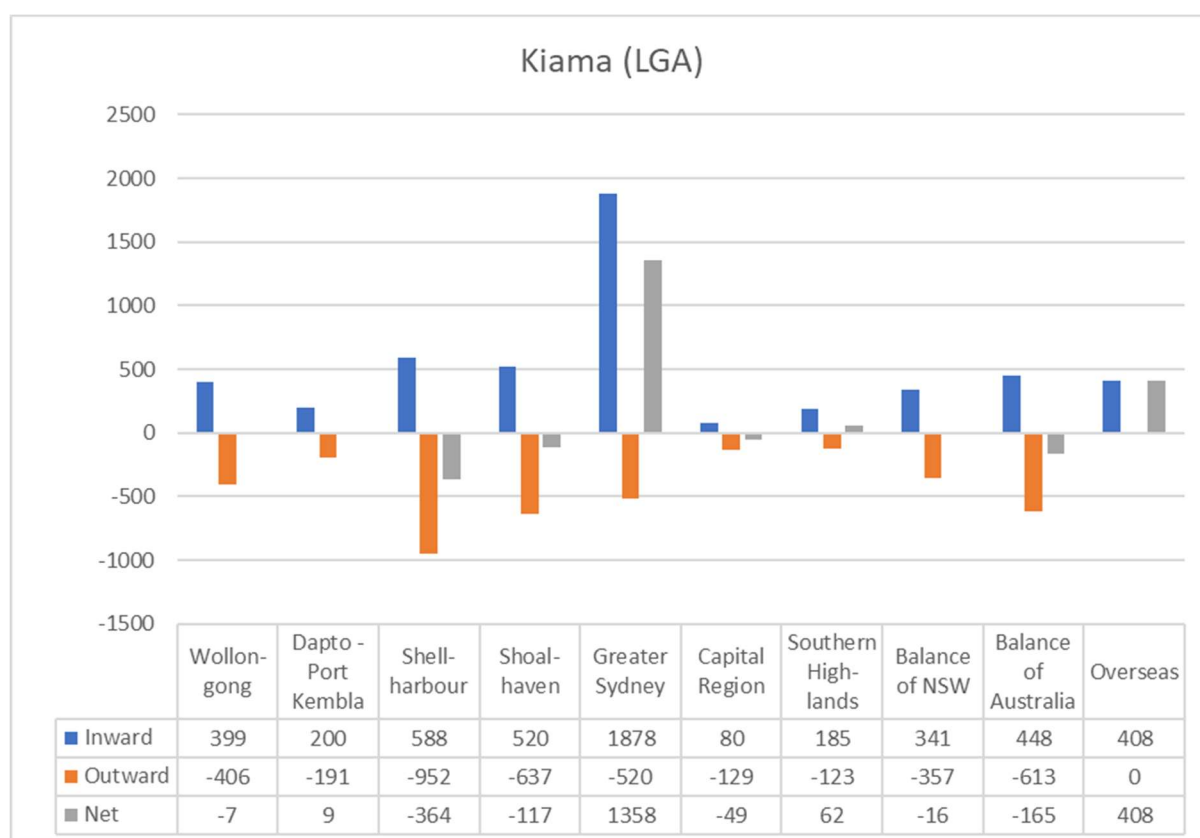
The greatest driver of inward and net migration for Kiama LGA was Greater Sydney. In total, 1,900 people moved into Kiama from Greater Sydney, with a net sum of 1,400 people moving inwards.

The greatest destination of migration out of Kiama was Shellharbour (1,000 people).

There was a net inward movement of people from the Southern Highlands (60 people).

There was a net outward movement of people to Shellharbour (400 people), Shoalhaven (100 people), and the balance of Australia (200 people).

Net migration to or from Wollongong, Dapto – Port Kembla, Capital Region, and the balance of NSW was fewer than 50 people in each case.



**Figure 0-85: Inward, outward, and net migration, Kiama LGA, 2016-2021**

Source: JSA 2022, based on ABS Census of Population and Housing 2021, persons, by place of usual residence at time of census and place of usual residence five years ago for selected SA3 and LGA areas.

## Shoalhaven

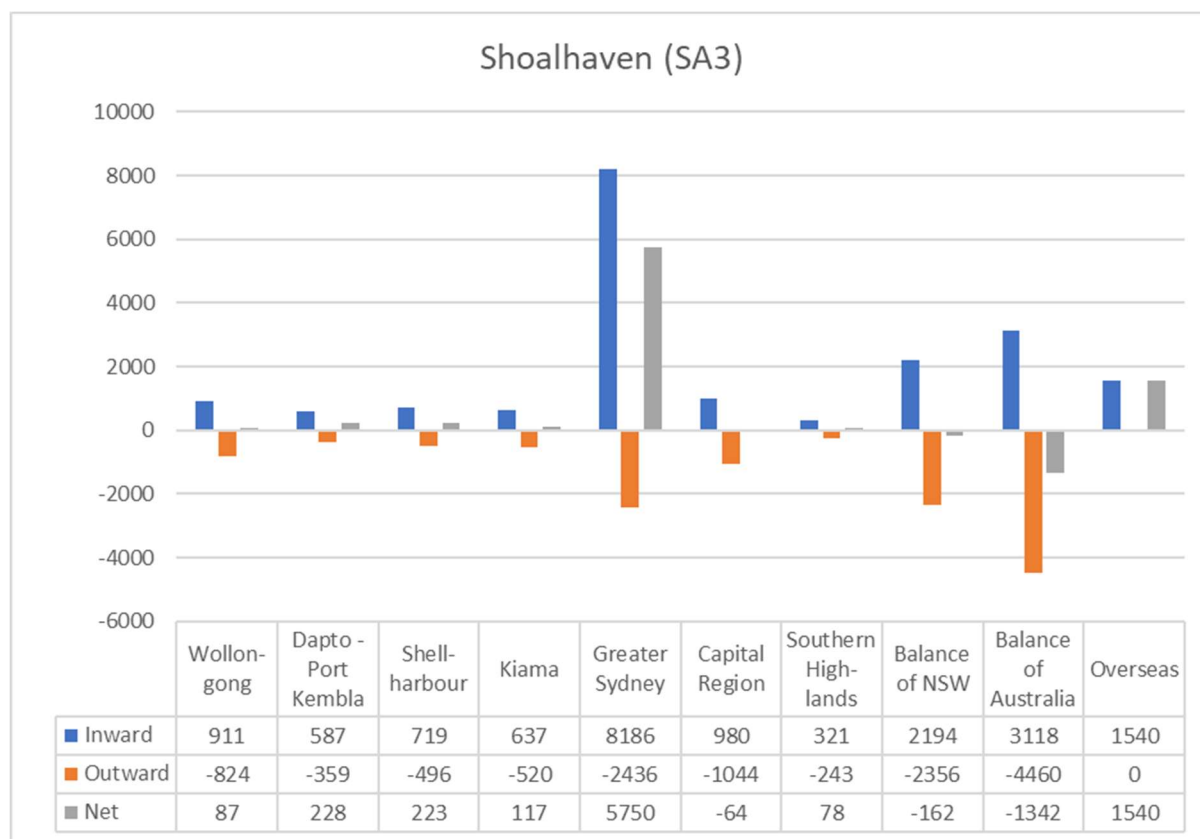
The greatest driver of inward and net migration for Shoalhaven SA3 was Greater Sydney. In total, 8,200 people moved into Shoalhaven from Greater Sydney, with a net sum of 5,800 people moving inwards.

The greatest destination for outwards migration from Shoalhaven was the balance of Australia, with 4,500 people leaving Shoalhaven for this area.

There was a net inward movement of people from Dapto – Port Kembla (230 people), Shellharbour (220 people), and Kiama (120 people).

There was a net outward movement of people to the balance of NSW (160 people) and the balance of Australia (1,300 people).

Net migration to or from Wollongong, Capital Region, and Southern Highlands was fewer than 100 people in each case.



**Figure 0-86: Inward, outward, and net migration, Shoalhaven SA3, 2016-2021**

Source: JSA 2022, based on ABS Census of Population and Housing 2021, persons, by place of usual residence at time of census and place of usual residence five years ago for selected SA3 and LGA areas.

### 1.12.3 Migration by personal income

In this section, we present a series of graphs for each area to help the reader understand the personal income profile of the people who are migrating to and from that area.

The first graph in the series shows inward and outward migration for the area, by ABS income band for weekly personal income, adjusted for the width of the ABS income band (for example, the \$150-\$299 band is \$150 wide). This adjustment helps to visualise the shape of the personal income distribution without the distortion that is caused by the income bands having different sizes. An example follows.

In absolute terms, about 4,500 people in the \$2,000-\$2,999 income band moved into the ISR between 2016 to 2021, compared to about the same number, 4,500 people, in the \$300-\$399 income band. However, first income band (\$1000 wide) is ten times the size of the second (\$100 wide). A graph of the absolute numbers of people could mislead into thinking that there was a peak in higher-income people migrating inwards. Hence, the number of people in each income band is divided by the size of the income band.

The adjusted numbers are 4.5 people per dollar of the \$2,000-\$2,999 band, compared to 45 people per dollar of the \$300-\$399 income band. This shows that a person migrating into the ISR was ten times more likely to be earning a single-dollar value picked from the \$300-\$399 band as a single-dollar value picked from the \$2,000-\$2,999 band. In concrete terms, it is of the order of ten times more likely that someone is earning \$350 than \$2,500.

The data for negative income and \$3,500 or more are excluded because they are unbounded, meaning the adjustment cannot be made. The data for nil income are excluded because it this income band is not a range, having zero width, and because the data overstate the number of people with no income and probably include many people whose income was not provided.

It is possible to directly compare the magnitude of migration, between inwards and outwards, and between areas, using this graph. For example, in Wollongong for the \$300-\$399 income band, there were about twice as many people moving in (2,000 people, or 20 people per dollar in the income band) as people moving out (1,100 people, or 11 people per dollar in the income band), and there were about twice as many people in the \$650-\$799 band moving into Wollongong (2,100 people, or 14 people per dollar in the income band) as Dapto – Port Kembla (1,100 people, or 7 people per dollar in the income band).

Overall, likelihood of migration into the ISR (per dollar in the income band) peaked in the \$300-\$399 and \$400-\$499 income bands, and declined thereafter. The likelihood of migration out of the ISR peaked in the \$300-\$399 income band, and likewise declined thereafter. There were about 1.7 times as many people migrating in as migrating out over the income range of \$1-\$3,499. This is reflected in the difference in magnitude of lines for inward and outward migration.

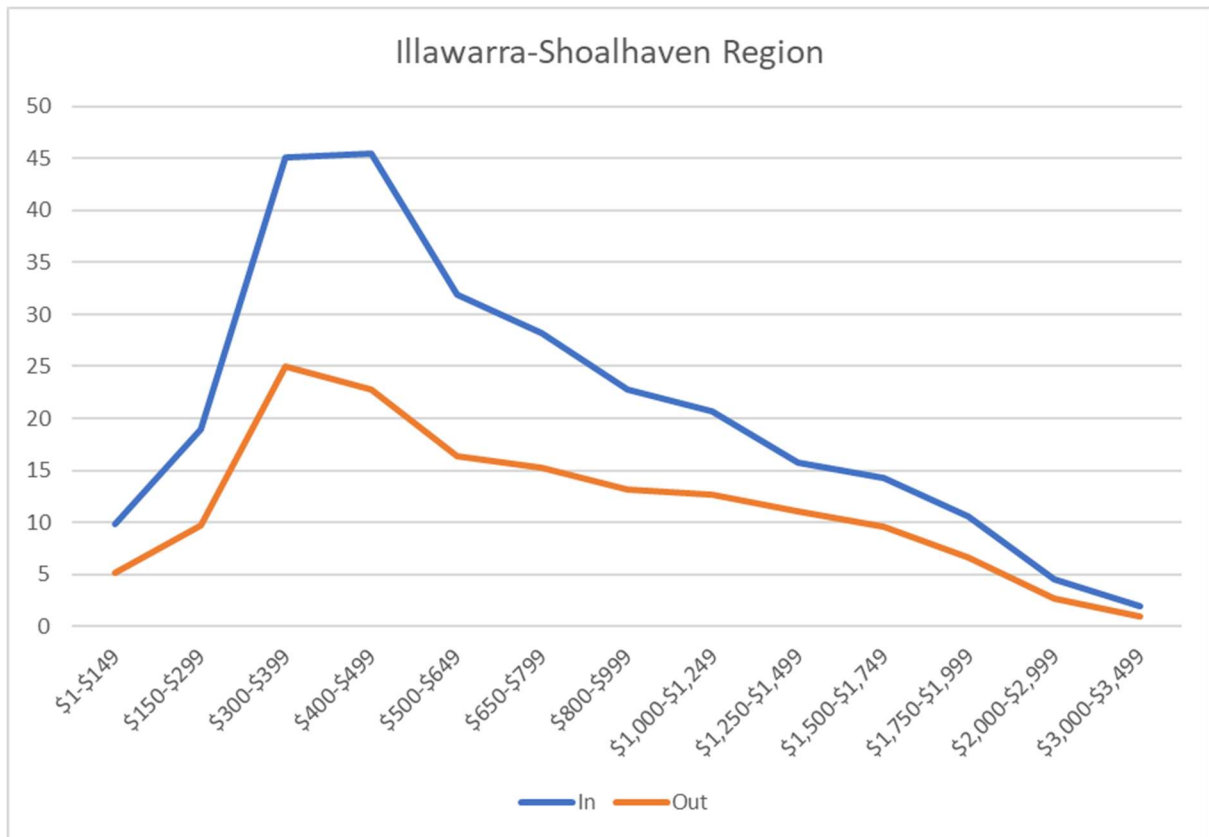


Figure 0-87: Inward and outward migration, persons per dollar in income band, by personal income band, Illawarra-Shoalhaven Region, 2016-2021

Source: JSA 2022, based on ABS Census of Population and Housing 2021, persons, by total personal income, by place of usual residence at time of census and/or place of usual residence five years ago for selected SA3 and LGA areas.

The second graph in the series shows the unadjusted numbers for each income range for inwards, outwards, and net inwards migration. It includes the unbounded or incomparable income bands, being negative income, nil income, and \$3,500 or more, that are excluded from the first graph.

Overall, there were about 1.8 times as many people migrating into the ISR between 2016 and 2021 as migrating out. In absolute terms, the \$1,000-\$1,249 income band had the greatest number of people migrating in either direction, with 5,200 moving in, and 3,200 moving out, for a net of 2,000 moving in. The nil income band had the greatest number of net people migrating inwards.

Twice as many people in the \$3,500 or more income band as in the \$3,000-\$3,499 income band migrated into the ISR. This case is similar for migration out, but with 1.5 times as many in the \$3,500 or more income band as in the \$3,000-\$3,499 income band. This indicates the existence of workers whose precise incomes are not captured and may be extremely high relative to the top income group of \$3,500 or more.

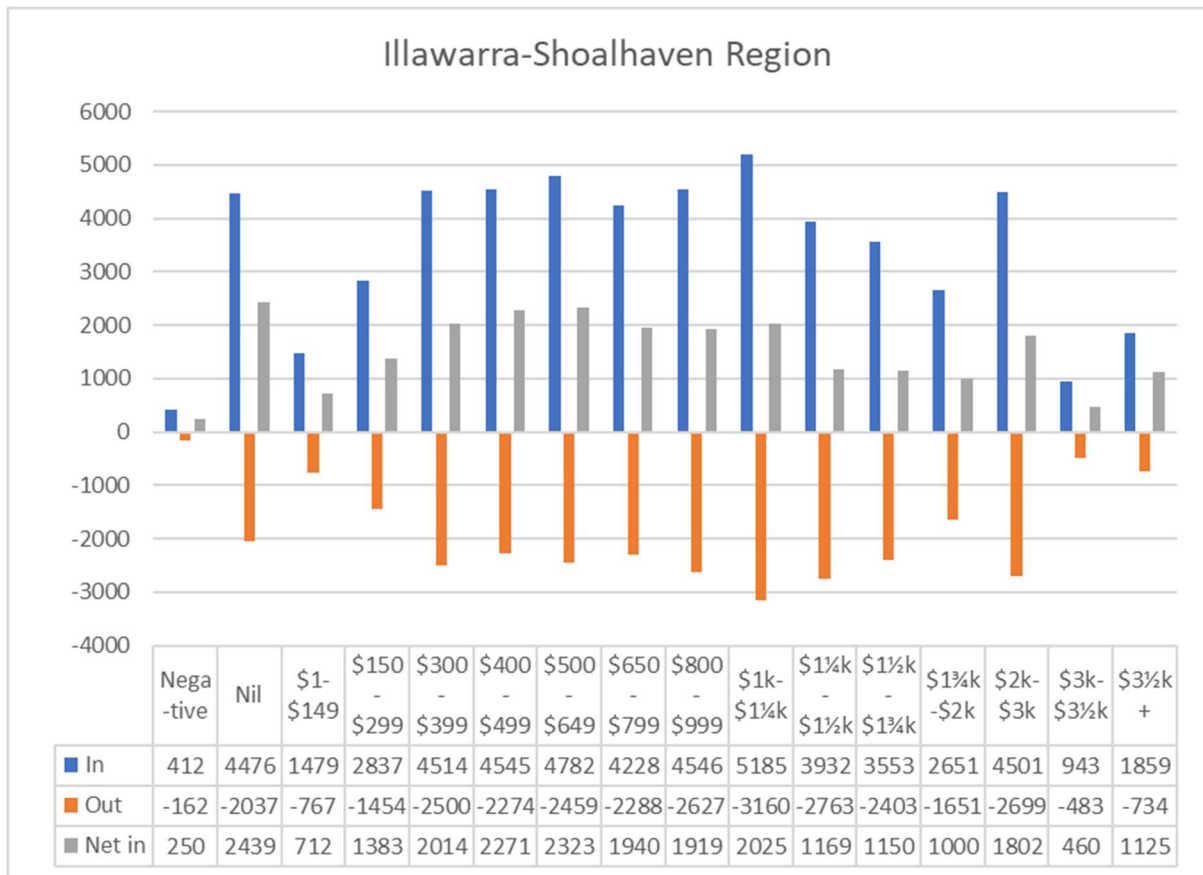


Figure 0-88: Inward, outward, and net inward migration, persons, by personal income, Illawarra-Shoalhaven Region, 2016-2021

Source: JSA 2022, based on ABS Census of Population and Housing 2021, persons, by total personal income, by place of usual residence at time of census and/or place of usual residence five years ago for selected SA3 and LGA areas.

## Wollongong

The likelihood of migration into Wollongong SA3 peaked in the \$300-399 and \$400-499 income bands, at about 20 people per dollar in the income band. The likelihood of migration out of Wollongong also peaked in these income bands, at about 11 people per dollar in the income band. Inward migration thereafter dropped off more steeply than outward migration, and the two were balanced by the \$1,250-\$1,499 income band, thereafter decreasing together almost in lockstep for both inward and outward migration. Inward migration likelihood in the top income band of \$3,000-\$3,499 (at about one person per dollar in the income band) was 20 times less than in the \$300-399 and \$400-499 income bands.

The almost identical magnitude of inward and outward migration for the higher-income groups means each higher-income worker who left Wollongong was replaced by a worker with about the same income. This could be indicative of the same kinds of higher-income jobs existing in both Wollongong and its biggest migration sources and destinations, such as Greater Sydney. This is in contrast with the lower-income groups, where almost twice as many workers migrated to Wollongong as migrated from Wollongong.

Taken together, the difference in migration between higher- and lower-income workers suggests two distinct cohorts of workers migrating to and from Wollongong. The first is higher-income cohort that migrates freely between Wollongong and Greater Sydney and, to a lesser extent, Dapto – Port Kembla. The second is a lower-income cohort that is moving inward to Wollongong from Greater Sydney but of whose members few are moving to Greater Sydney in return.

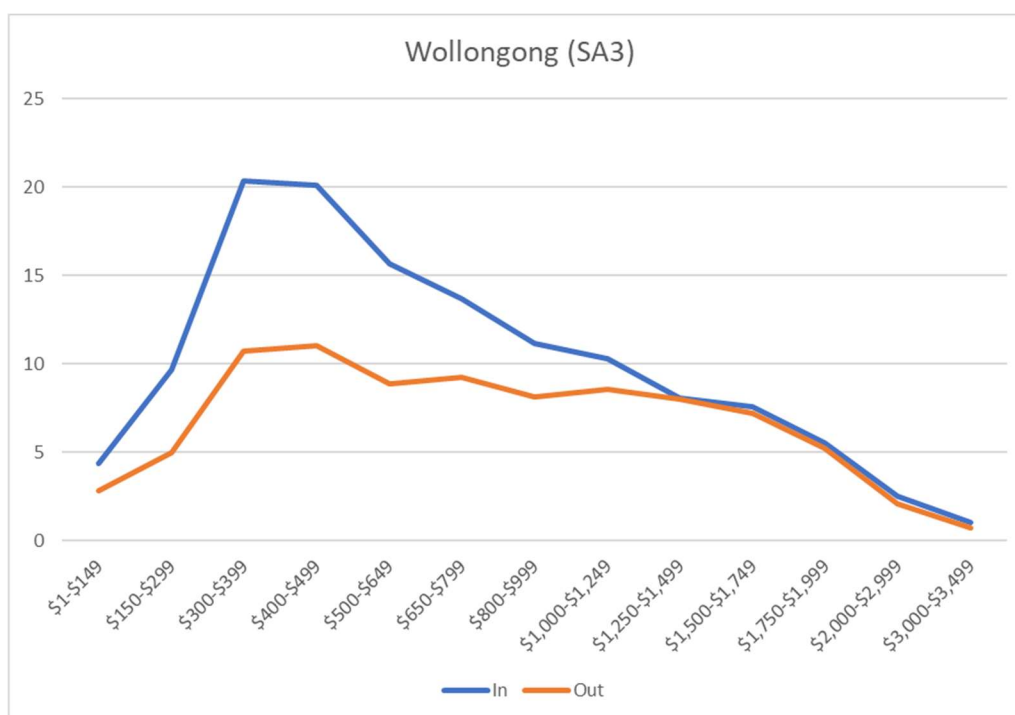


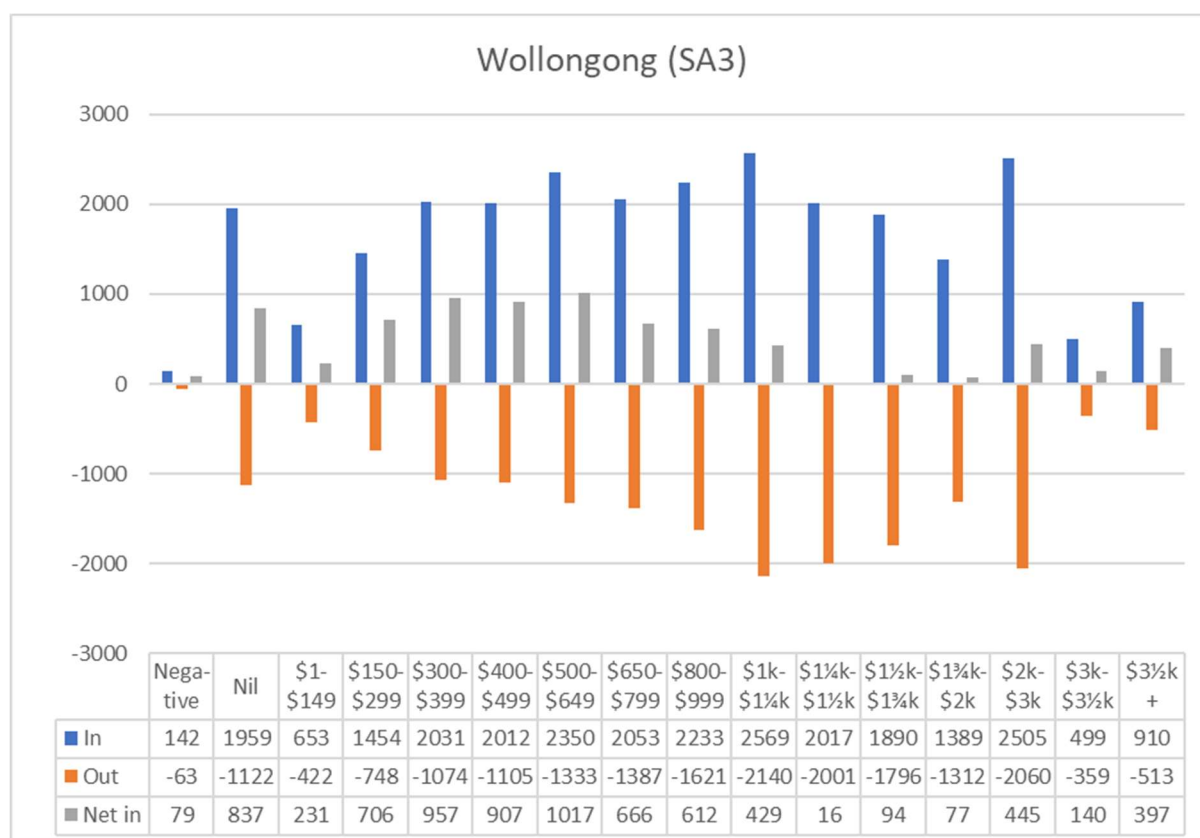
Figure 0-89: Inward and outward migration, persons per dollar in income band, by personal income band, Wollongong SA3, 2016-2021

Source: JSA 2022, based on ABS Census of Population and Housing 2021, persons, by total personal income, by place of usual residence at time of census and/or place of usual residence five years ago for selected SA3 and LGA areas.

In absolute terms, the biggest group of people migrating into and out of Wollongong were those in the \$1,000-\$1,249 income band, with 2,600 people migrating in, and 2,100 people migrating out.

Net migration into Wollongong was less than 100 for the negative income band and for each of the individual income bands that comprise the range between \$1,250 and \$1,999. For the negative income band, this reflects the relatively low amount of in- and out-migration, but for the other income bands, this reflects like-for-like replacement of higher income workers that was noted above.

There were almost twice as many people who migrated into Wollongong in the \$3,500 or more income band than in the \$3,000-\$3,499 income band. Again, the \$3,500 or more income band will include some workers with incomes that are much higher than \$3,500.



**Figure 0-90: Inward, outward, and net inward migration, persons, by personal income, Wollongong SA3, 2016-2021**

Source: JSA 2022, based on ABS Census of Population and Housing 2021, persons, by total personal income, by place of usual residence at time of census and/or place of usual residence five years ago for selected SA3 and LGA areas.

## Dapto – Port Kembla

The likelihood of inwards and outwards migration for Dapto – Port Kembla SA3 peaked in both cases in the \$300-\$399 income band. This peak was more pronounced for in-migration, at 11 people per dollar in the income band. Thereafter there was a slight rise for the \$500-\$649 income band for both inwards and outwards migration, after which both decreased steadily.

The difference in in-migration and out-migration between the higher- and lower-income ranges was not as pronounced as with Wollongong. In general, the same types of people with respect to income were moving both in and out of Dapto – Port Kembla, albeit with about 1.2 times as many people moving in as out across the \$1 to \$3,499 range.

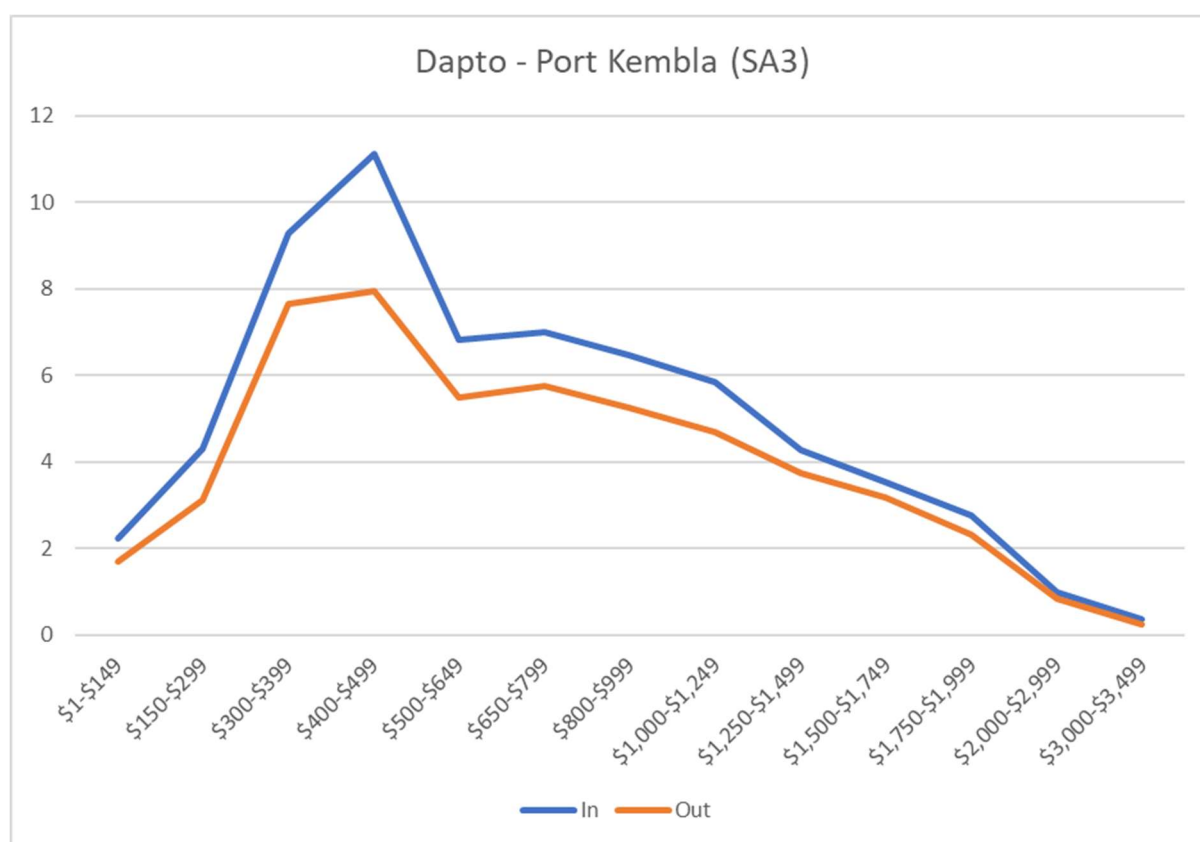


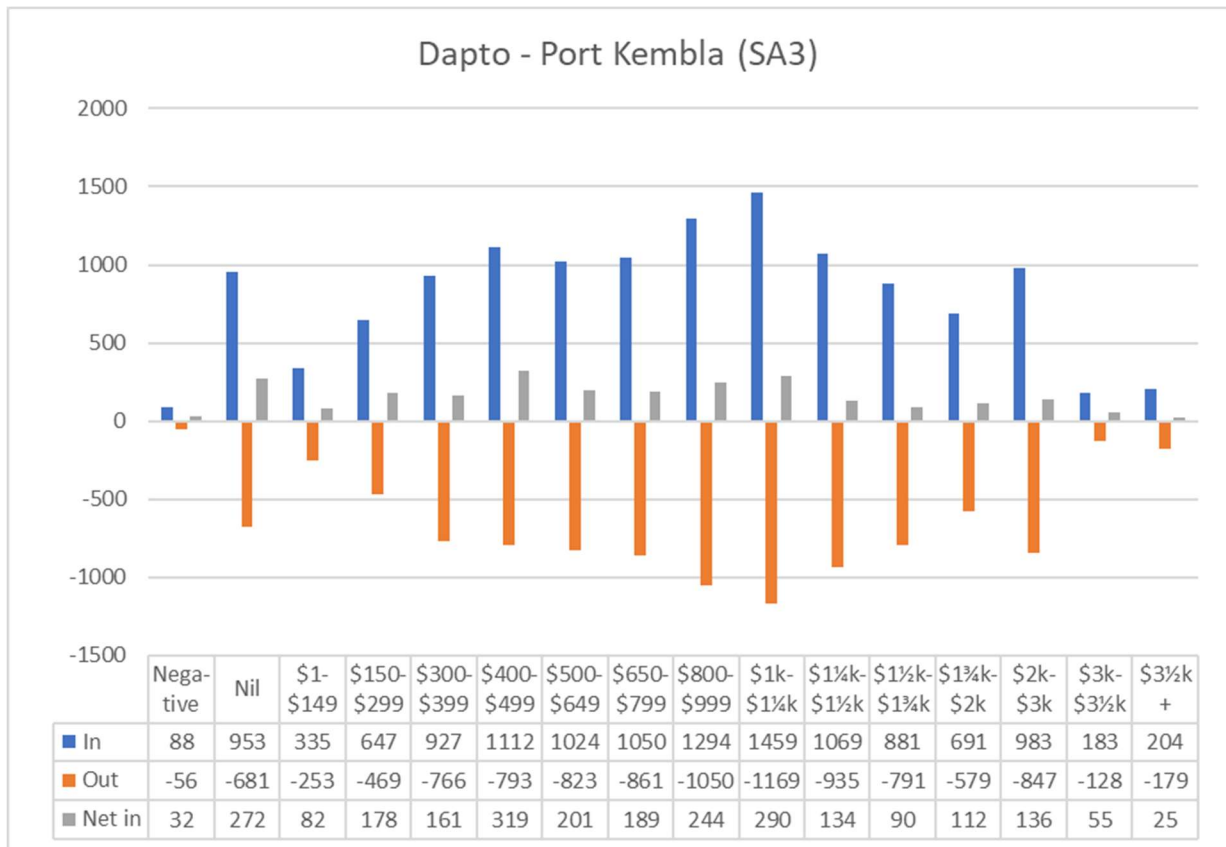
Figure 0-91: Inward and outward migration, persons per dollar in income band, by personal income band, Dapto – Port Kembla SA3, 2016-2021

Source: JSA 2022, based on ABS Census of Population and Housing 2021, persons, by total personal income, by place of usual residence at time of census and/or place of usual residence five years ago for selected SA3 and LGA areas.



In absolute terms, the biggest group of people migrating into Dapto – Port Kembla were in the \$1,000-\$1,249 income band, with 1,500 moving in and 1,200 moving out, for a net total of 300 people moving in.

The high number of people in the \$3,500 or more income band migrating inwards that was seen in Wollongong was not seen in Dapto – Port Kembla.



**Figure 0-92: Inward, outward, and net inward migration, persons, by personal income, Dapto – Port Kembla SA3, 2016-2021**

Source: JSA 2022, based on ABS Census of Population and Housing 2021, persons, by total personal income, by place of usual residence at time of census and/or place of usual residence five years ago for selected SA3 and LGA areas.

## Shellharbour

The likelihood of migration into Shellharbour LGA peaked in the \$400-\$499 income band, at 11 people per dollar in that income band. Migration out of Shellharbour peaked in the \$300-\$399 income band, which was a lower income than that of Wollongong and Dapto – Port Kembla, above.

There was about 1.6 times as much migration into Shellharbour as migration out across the \$1 to \$3,499 income range. This difference was especially pronounced in the higher-income bands. For the \$2,000-\$2,999 income band, the likelihood of in-migration was 1.8 times the likelihood of out-migration and for the \$1,750-\$1,999 and \$3,000-\$3,499 income bands the likelihood of in-migration was more than double that of out-migration.

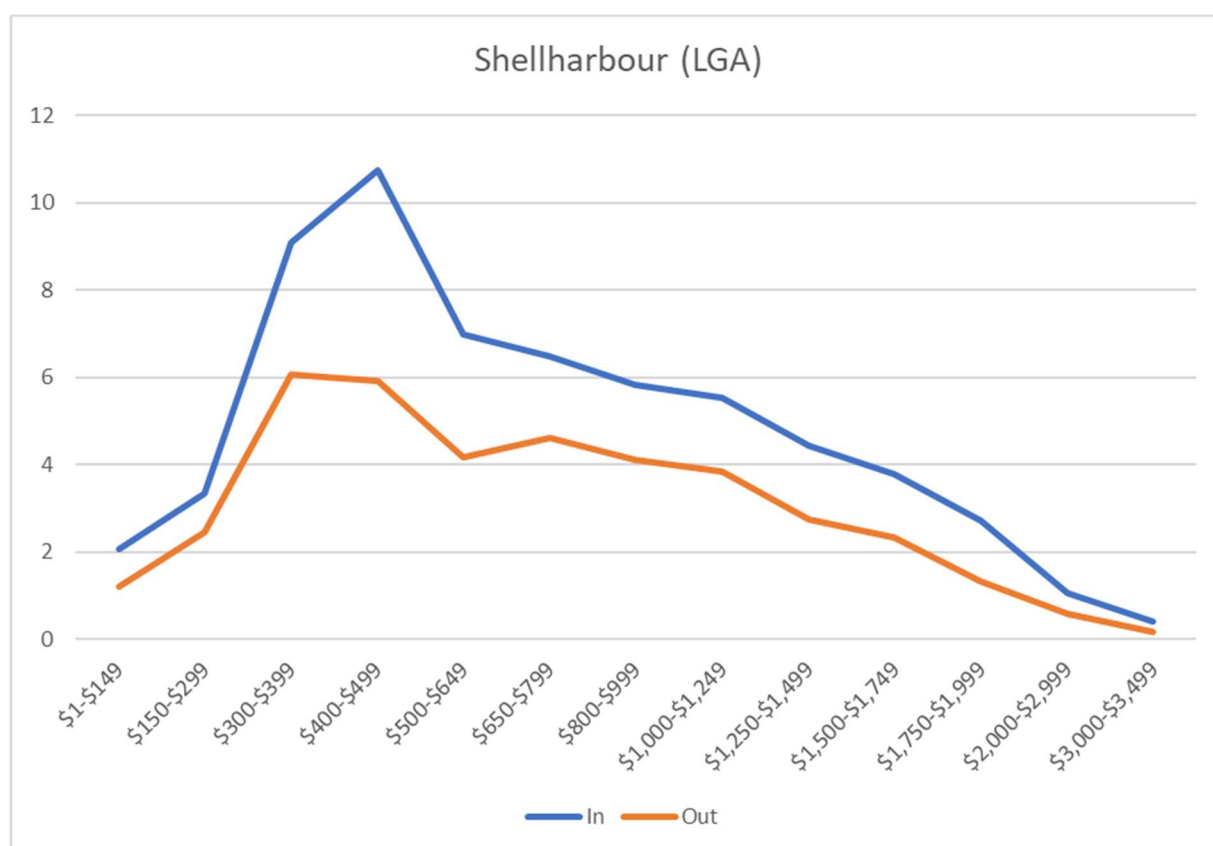


Figure 0-93: Inward and outward migration, persons per dollar in income band, by personal income band, Shellharbour LGA, 2016-2021

Source: JSA 2022, based on ABS Census of Population and Housing 2021, persons, by total personal income, by place of usual residence at time of census and/or place of usual residence five years ago for selected SA3 and LGA areas.

In absolute terms, as with Wollongong and Dapto – Port Kembla, the \$1,000-\$1,249 income band had the greatest amount of migration in and out of Shellharbour, with 1,400 people moving in and 1,000 people moving out.

Net in-migration was highest in the \$400-\$499 income band, with a net total of 500 people moving in.

In concordance with the previous graph of immigration adjusted for the width of income bands for Shellharbour, there were relatively more people in net terms at the higher income levels moving in than there were in Wollongong and Dapto – Port Kembla.

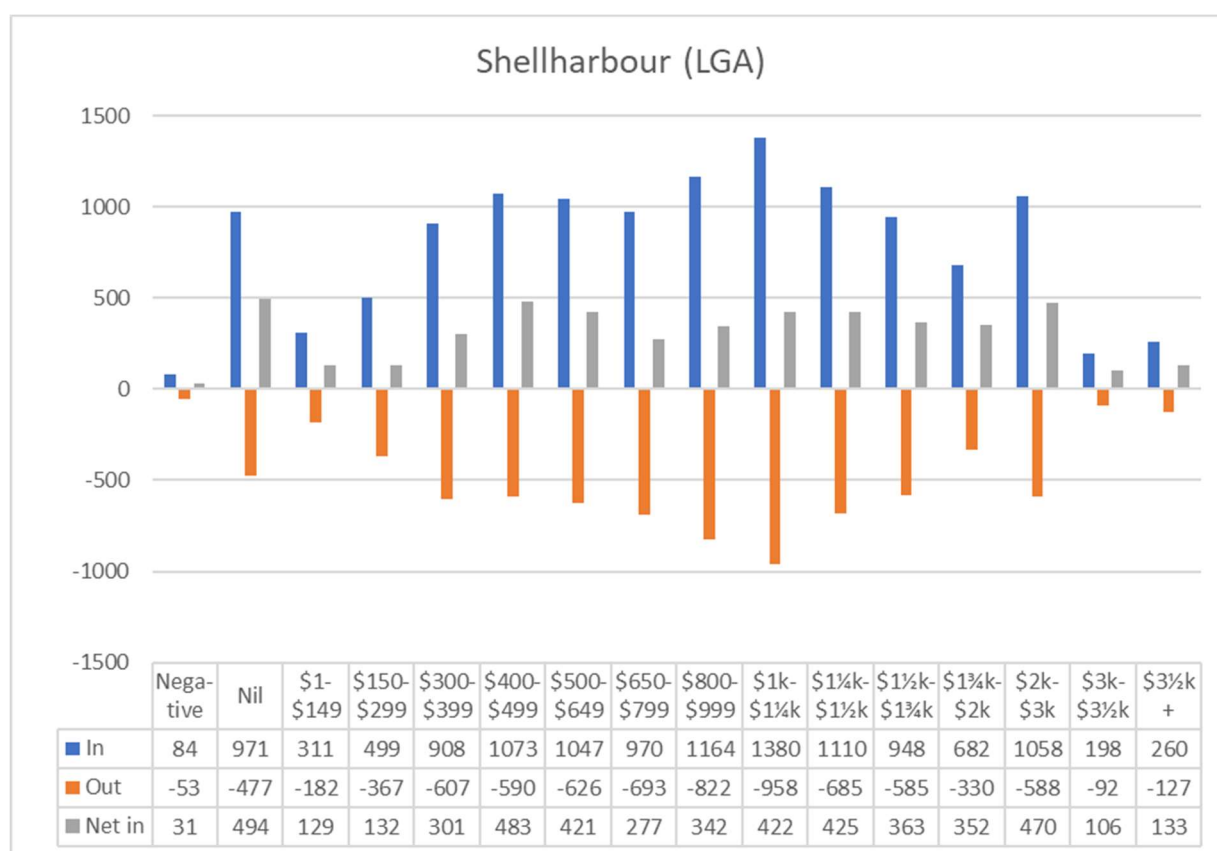


Figure 0-94: Inward, outward, and net inward migration, persons, by personal income, Shellharbour LGA, 2016-2021

Source: JSA 2022, based on ABS Census of Population and Housing 2021, persons, by total personal income, by place of usual residence at time of census and/or place of usual residence five years ago for selected SA3 and LGA areas.

## Kiama

The likelihood of migration into Kiama LGA peaks in the \$300-\$399 income band, at 2.9 people per dollar in this income band. The likelihood of out migration out of Kiama peaks in the \$400-\$499 income band, at 2.6 people per dollar in this income band.

The migration profile for Kiama with respect to income is quite different from that of all other study areas. Inwards and outwards migration likelihoods are evenly matched across the bottom and middle of the income range, from \$1 to about \$1,499 or \$1,749. Towards the top of the income range there is a big difference between in-migration and out-migration, with this difference being in favour of in-migration. This is more clearly seen in the next graph, as it also shows the \$3,500 income band.

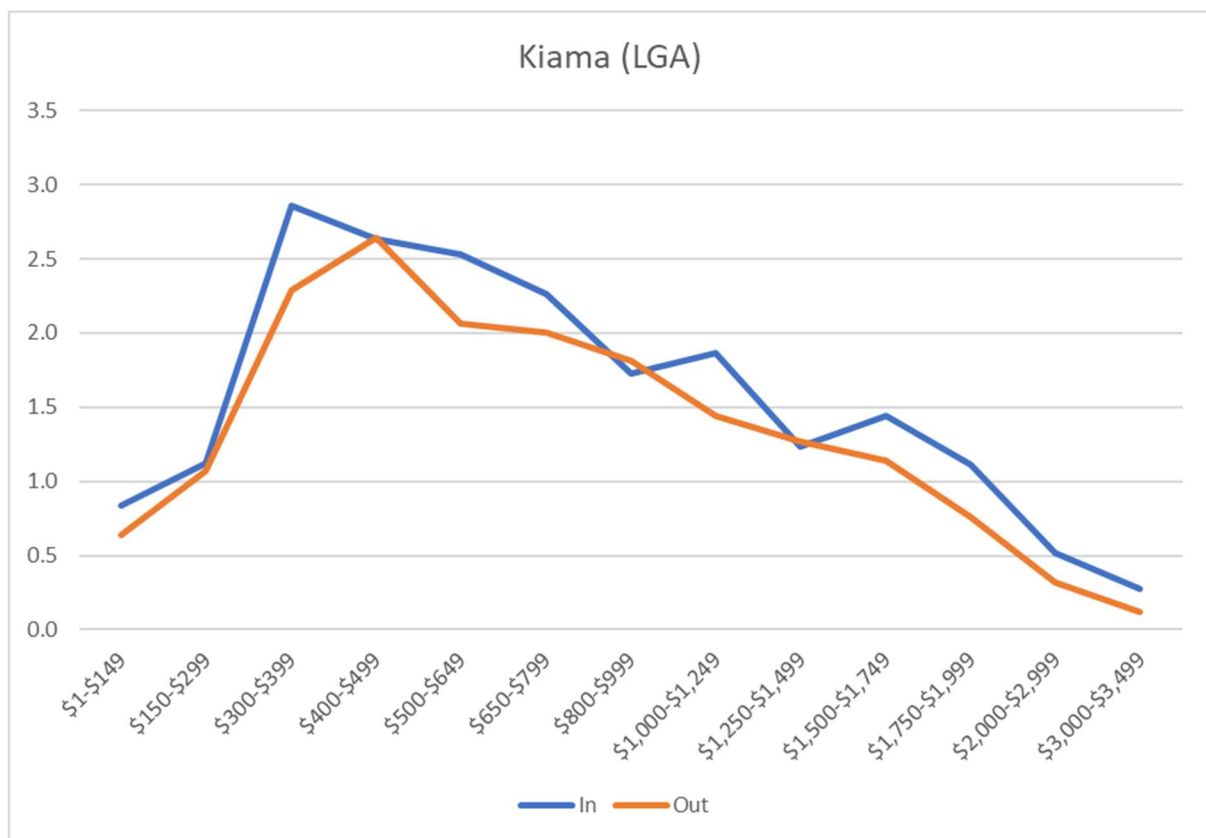


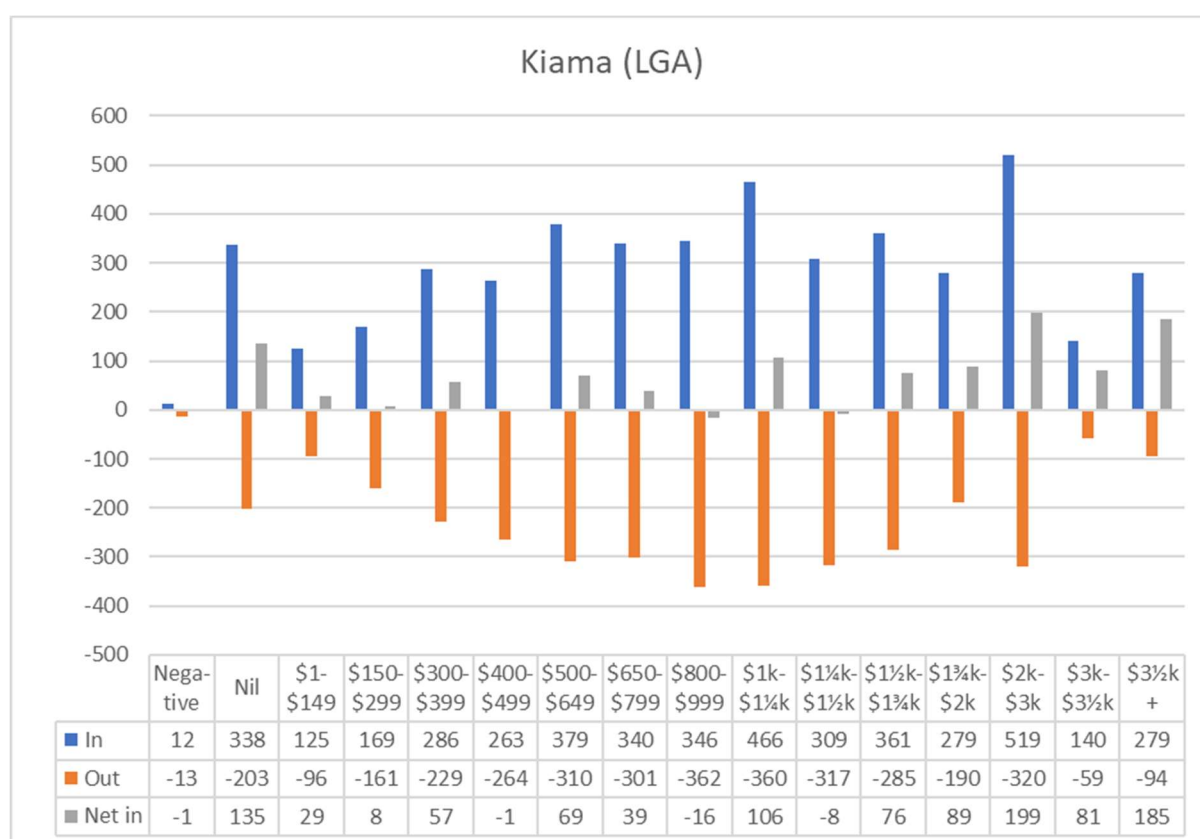
Figure 0-95: Inward and outward migration, persons per dollar in income band, by personal income band, Kiama LGA, 2016-2021

Source: JSA 2022, based on ABS Census of Population and Housing 2021, persons, by total personal income, by place of usual residence at time of census and/or place of usual residence five years ago for selected SA3 and LGA areas.

In absolute terms, the \$2,000-\$2,999 income band had the greatest amount of migration into Kiama, with 520 people moving in. The \$800-999 and \$1,000-\$1,249 bands had the greatest amount of migration out of Kiama, with 360 people in each income band moving out.

There was a large net migration into Kiama (relative to overall migration for Kiama) in the \$2,000-\$2,999 income band (200 people in net) and the \$3,500 or more income band (200 people in net). Again, this is very different than what is seen for the other areas, although the large net in-migration in the \$2,000-\$2,999 band is somewhat like that for Shellharbour.

Compared to the other study areas, Kiama has more individuals with very high incomes moving in, relative to its overall migration profile.



**Figure 0-96: Inward, outward, and net inward migration, persons, by personal income, Kiama LGA, 2016-2021**

Source: JSA 2022, based on ABS Census of Population and Housing 2021, persons, by total personal income, by place of usual residence at time of census and/or place of usual residence five years ago for selected SA3 and LGA areas.

## Shoalhaven

The likelihood of migration into and out of Shoalhaven SA3 peaks in both cases in the \$300-\$399 income band, at 18 people per dollar in this income band moving in, and 12 people per dollar in this income band moving out.

There were two somewhat distinct groups, the first comprising the income bands between \$150 and \$649 with about 1.5 times as much in-migration as out-migration, and the second comprising the income bands between \$650 and \$2,999 with about 1.8 times as much in-migration as out-migration.

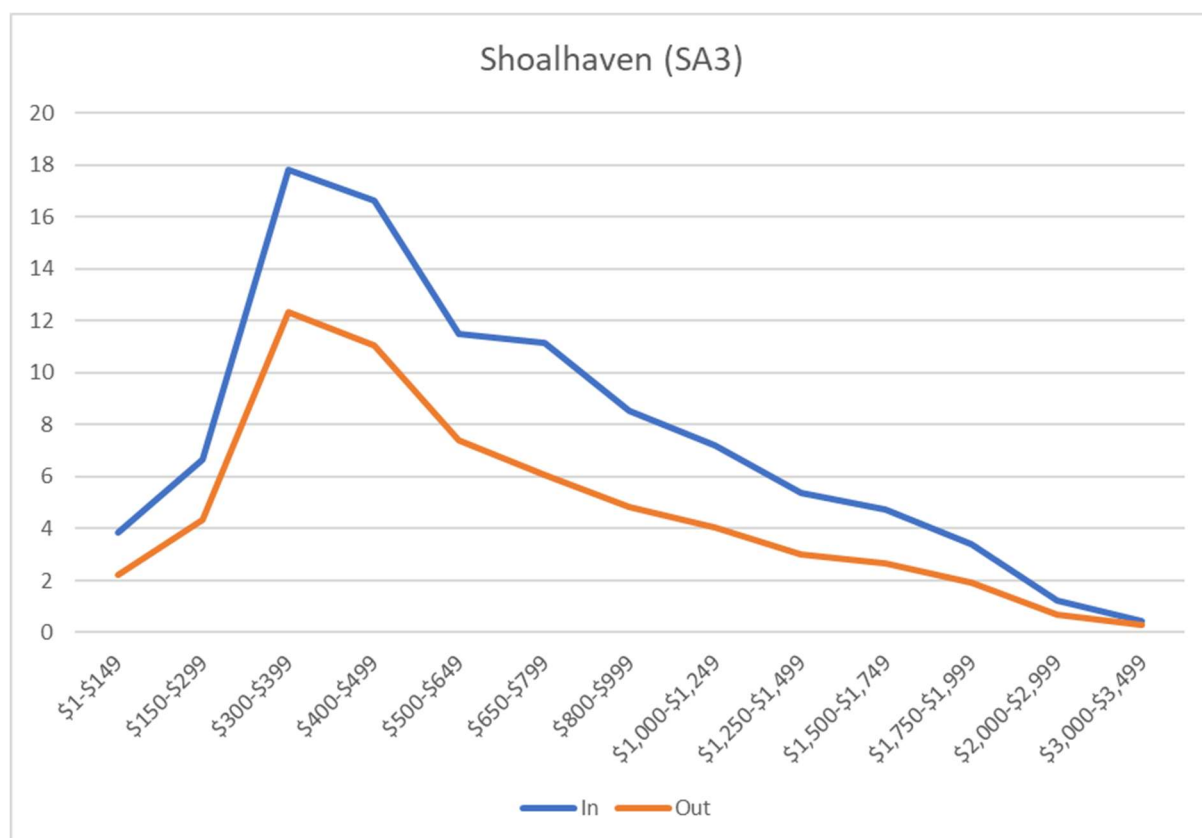


Figure 0-97: Inward and outward migration, persons per dollar in income band, by personal income band, Shoalhaven SA3, 2016-2021

Source: JSA 2022, based on ABS Census of Population and Housing 2021, persons, by total personal income, by place of usual residence at time of census and/or place of usual residence five years ago for selected SA3 and LGA areas.

In absolute terms, the \$1,000-\$1,249 income band had the greatest number of people migrating into Shoalhaven, with 1,400 people moving in. The \$300-\$399 income band has the greatest number of people migrating out of Shoalhaven, with 1,200 people moving out.

There was a relatively large amount of net in-migration of people earning \$3,500 or more, with a net of 400 people moving in. The \$1,000-\$1,249 band had the largest unadjusted amount of net in-migration, with 800 people moving in.

Overall, inward migration was 1.7 times outward migration.

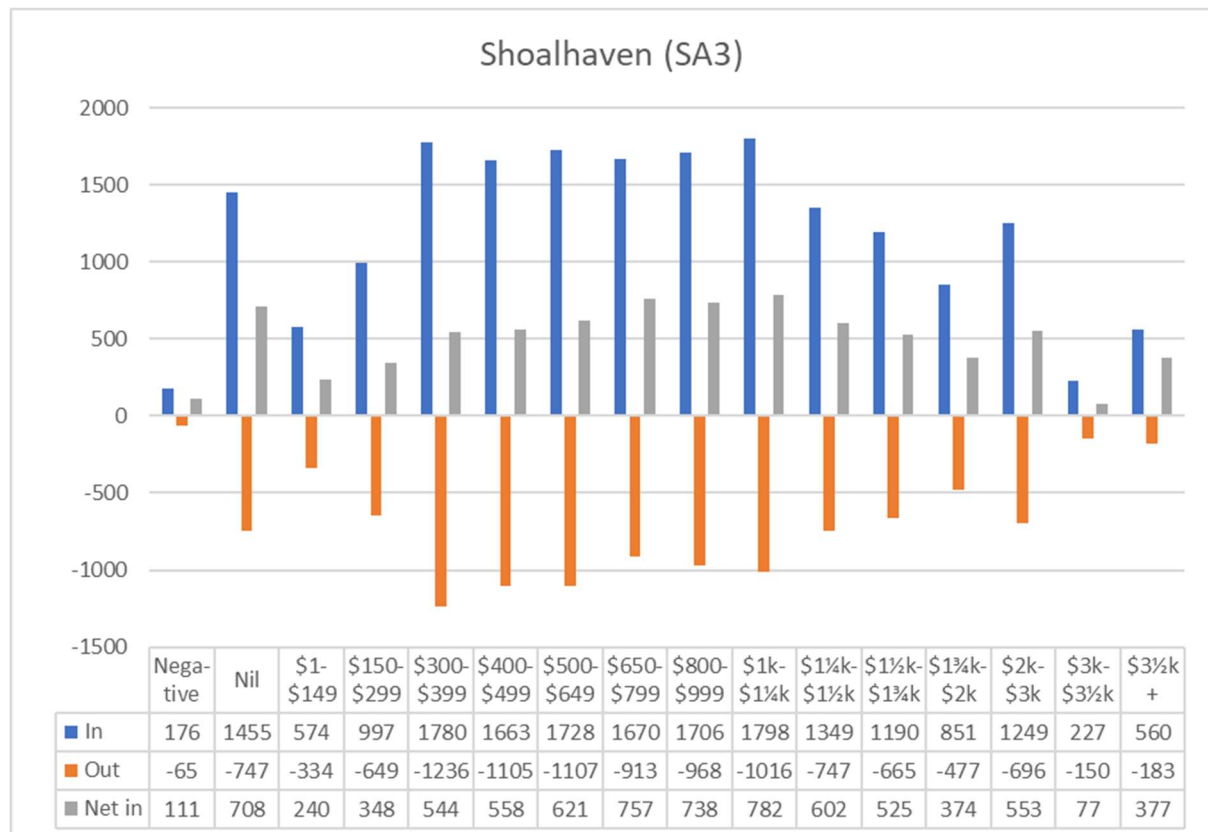
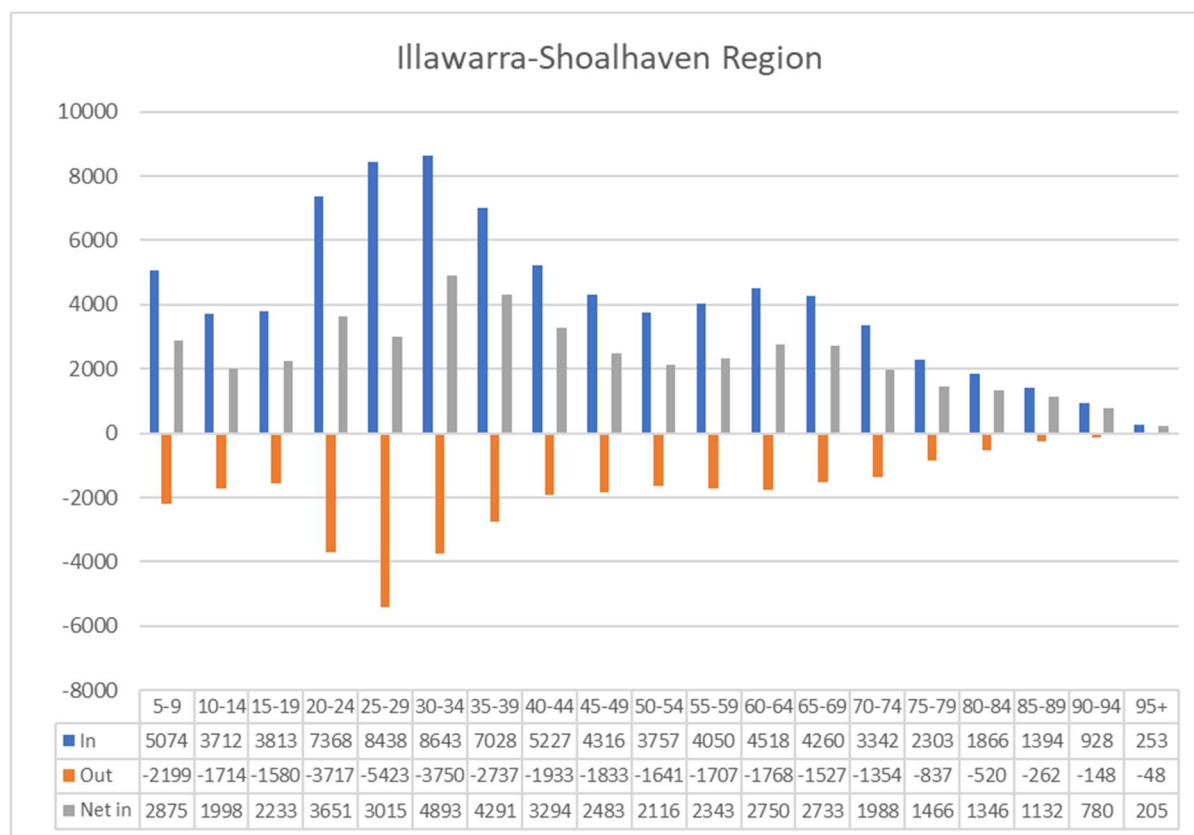


Figure 0-98: Inward, outward, and net inward migration, persons, by personal income, Shoalhaven SA3, 2016-2021

Source: JSA 2022, based on ABS Census of Population and Housing 2021, persons, by total personal income, by place of usual residence at time of census and/or place of usual residence five years ago for selected SA3 and LGA areas.

### 1.12.4 Migration by age

There was a net migration into the ISR across all age groups.



**Figure 0-99: Inward, Outward and Net migration across age groups in the ISR, 2016-2021**

Source: JSA 2022, based on ABS Census of Population and Housing 2021, persons, by total personal income, by place of usual residence at time of census and/or place of usual residence five years ago for selected areas.



The age profile of those migrating into and out of the ISR was similar except for a jump of two percentage points in the proportion of people migrating outwards at 20-24, which spikes to a difference of five percentage points at 25-29.

Please note that the percentages in the graph below are calculated as the number of people of a particular age range in a migration group (in- or out-migrants) divided by the number people in that migration group. This contrasts with the graphs that were adjusted for the income bands in the previous section; although these graphs look similar, they are calculated differently.

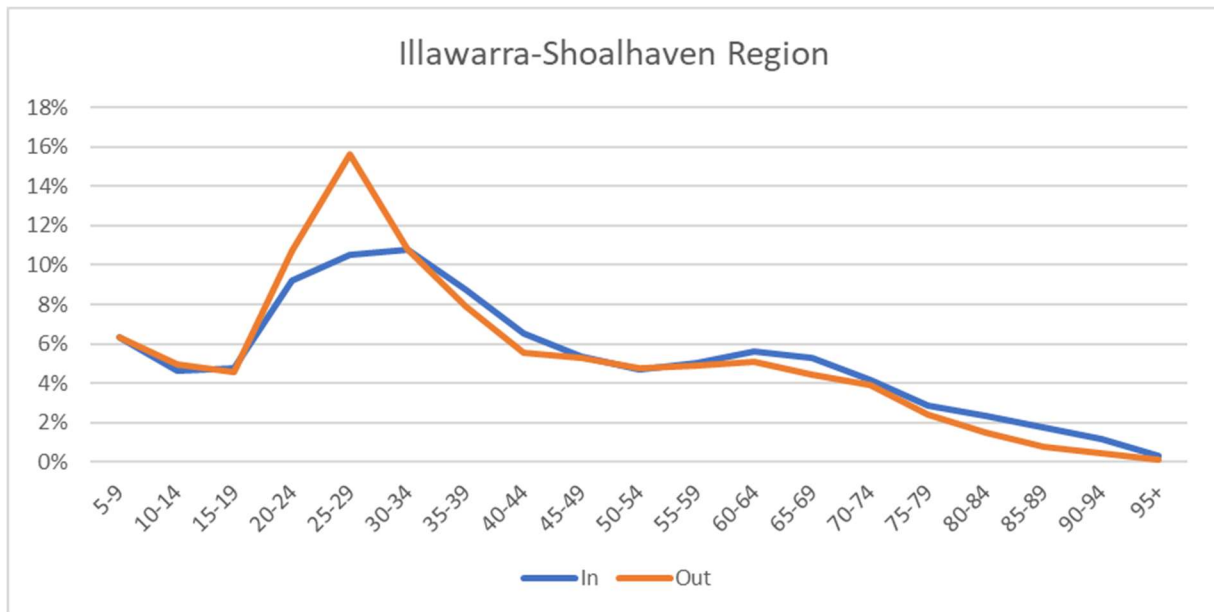


Figure 0-100: Inward, Outward migration across age groups in the ISR, 2016-2021

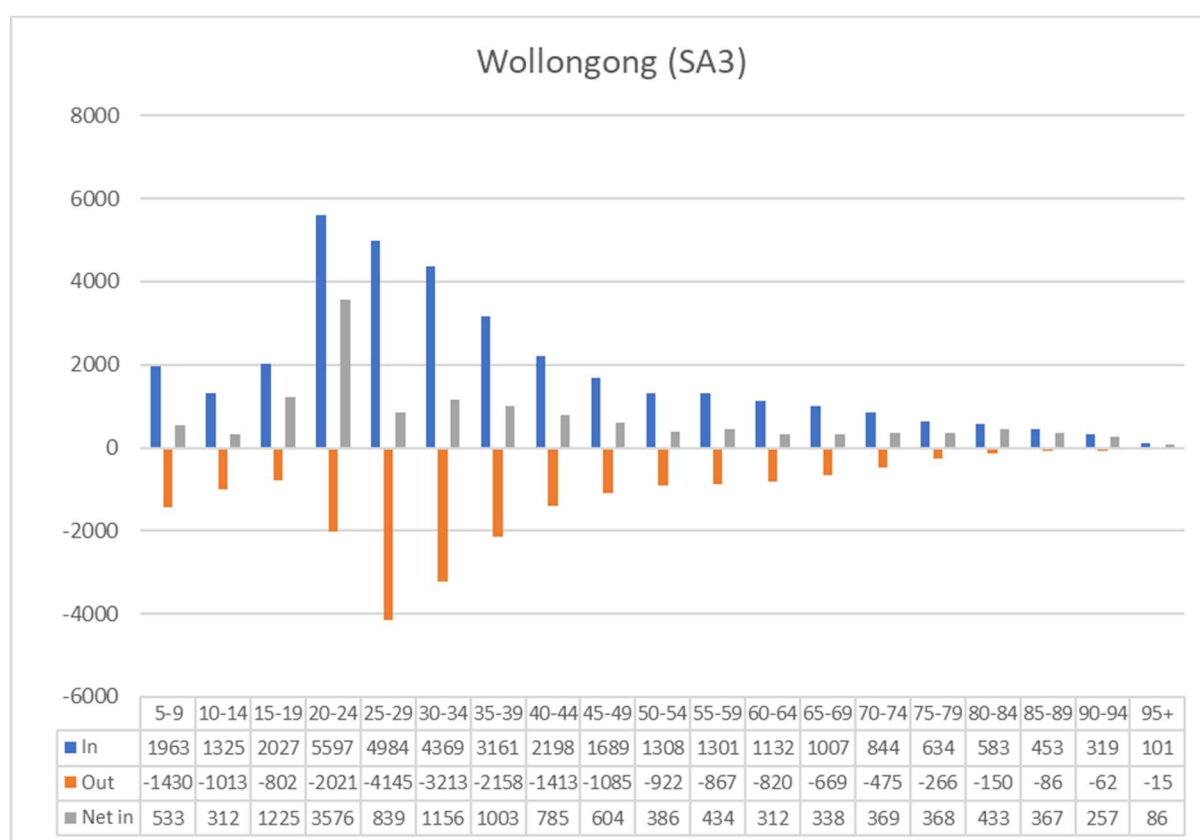
Source: JSA 2022, based on ABS Census of Population and Housing 2021, persons, by total personal income, by place of usual residence at time of census and/or place of usual residence five years ago for selected areas.

## Wollongong

There was a net migration into Wollongong SA3 across all age groups. The highest turnover was within the 25-29 age group.

Net inward migration was highest in the 20-24 age group and was driven by an almost three-fold jump in in-migration compared to the previous age group. Net inward migration was also relatively high for the 15-19 age group, with the corresponding jump in in-migration. Taken together, these probably reflect students arriving at the University of Wollongong.

There was a drop in net out-migration for the 25-29 age group that was driven by a two-fold jump in out-migration compared to the previous age group (20-24). Like before, this probably reflects university students leaving Wollongong at the end of studies.



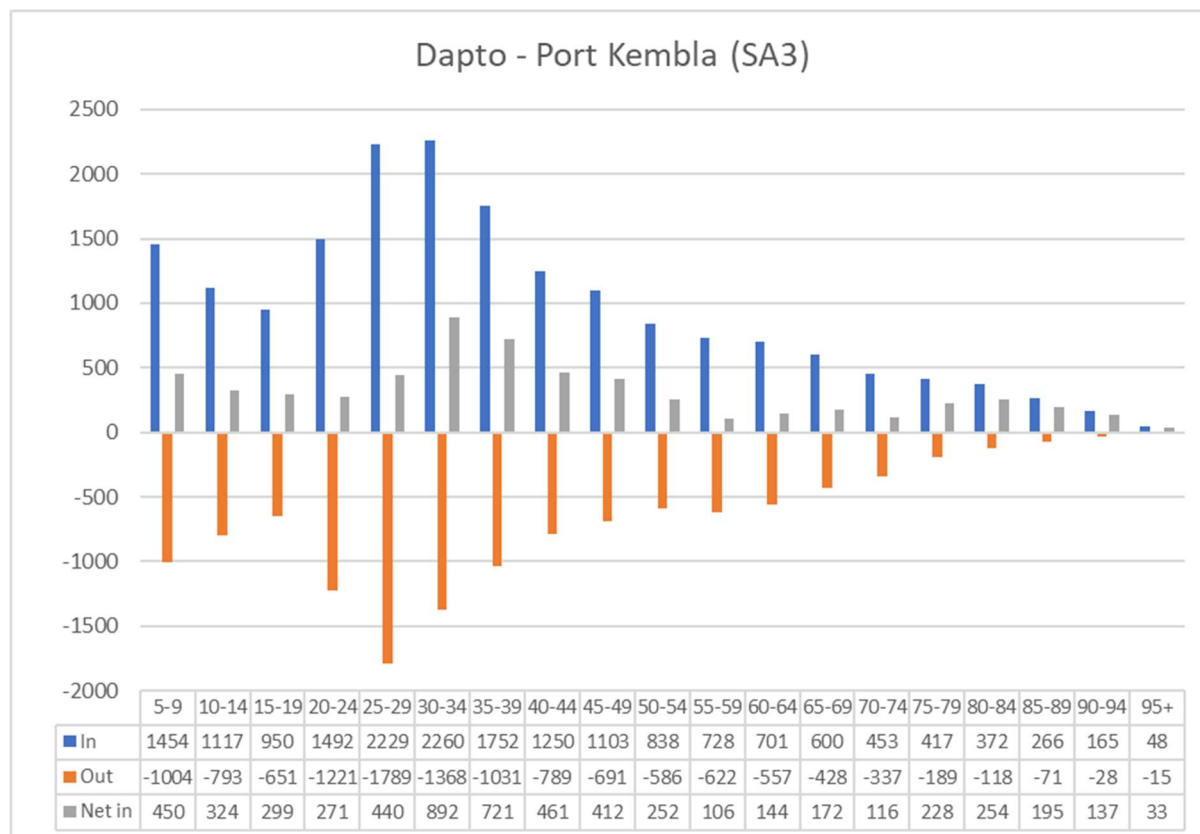
**Figure 0-101: Inward, outward, and net migration, by age, Wollongong SA3, 2016-2021**

Source: JSA 2022, based on ABS Census of Population and Housing 2021, persons, by five-year age group, by place of usual residence at time of census and/or place of usual residence five years ago for selected SA3 and LGA areas.

## Dapto – Port Kembla

There was a net migration into Dapto – Port Kembla SA3 over all age groups. Net in-migration was highest among those aged 30-34. Turnover of people (both in- and out-migration combined) was highest among those aged 25-29.

The distribution of ages across the in-migrating, out-migrating, and net migrating cohort was bimodal, with peaks at 5-9 years and at 30-34 years. This probably reflects the migration of newly-formed families with young children.



**Figure 0-102: Inward, outward, and net migration, by age, Dapto – Port Kembla SA3, 2016-2021**

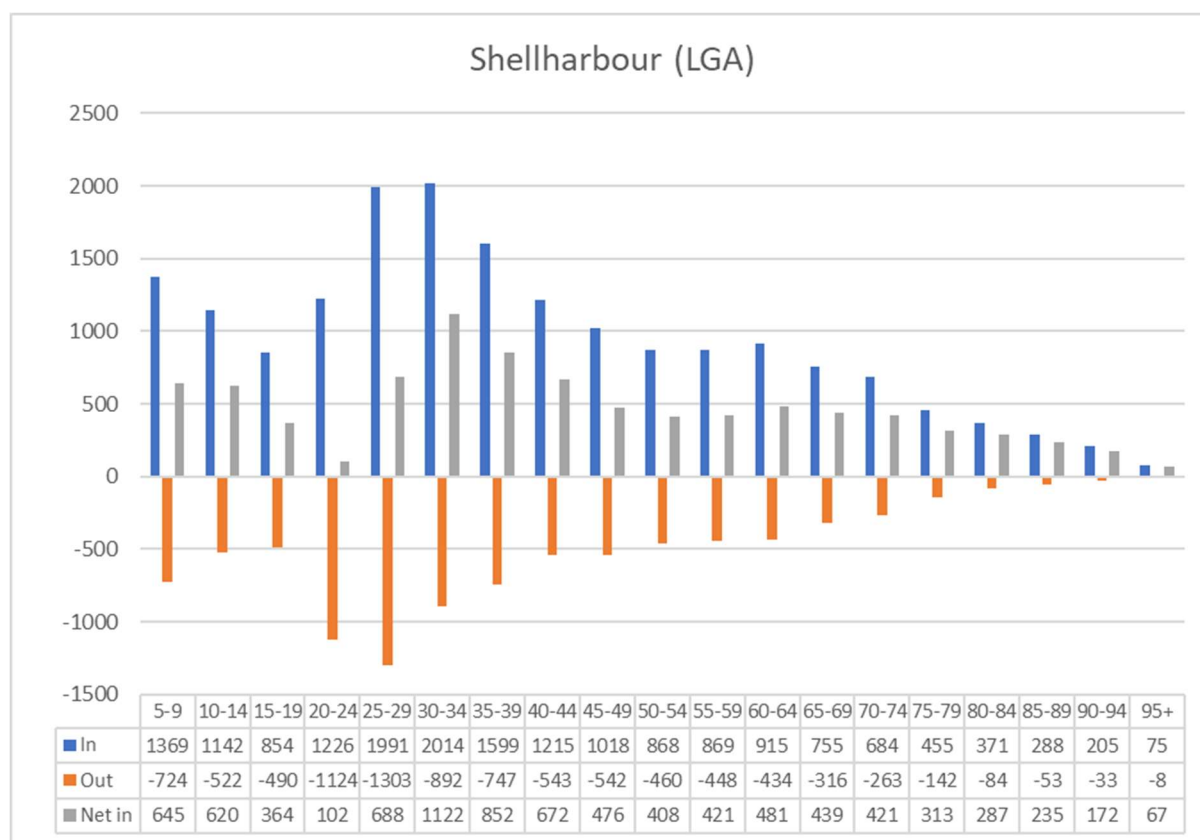
Source: JSA 2022, based on ABS Census of Population and Housing 2021, persons, by five-year age group, by place of usual residence at time of census and/or place of usual residence five years ago for selected SA3 and LGA areas.

## Shellharbour

There was a net migration into Shellharbour LGA across all age groups, although this drops to only about 100 people in the 20-24 age group. The highest in-migration was in the 30-34 age group. Turnover was highest in the 25-29 age group.

Three distinct peaks are visible in in-migration and net in-migration; a medium-sized peak for 5-9 years, a large peak for 30-34 years, and a smaller peak for 60-64 years. These probably correspond to young families, as in Dapto – Port Kembla, and to some people who are close to retirement age.

The dip in the 20-24 age group is probably due to young people of school leaving age going to more urbanised areas for work opportunities.



**Figure 0-103: Inward, outward, and net migration, by age, Shellharbour LGA, 2016-2021**

Source: JSA 2022, based on ABS Census of Population and Housing 2021, persons, by five-year age group, by place of usual residence at time of census and/or place of usual residence five years ago for selected SA3 and LGA areas.

## Kiama

There was net migration into Kiama LGA across all age groups except for the 20-24 and 25-29 groups. Highest turnover was in the 25-29 age group.

The three peaks seen for Shellharbour are also seen for Kiama, albeit with more people near retirement age moving inwards.

The net out-migration for the 20-24 and 25-29 age groups, and the close to zero net in-migration for the 15-19 age group, again probably reflect young people leaving Kiama to start work.

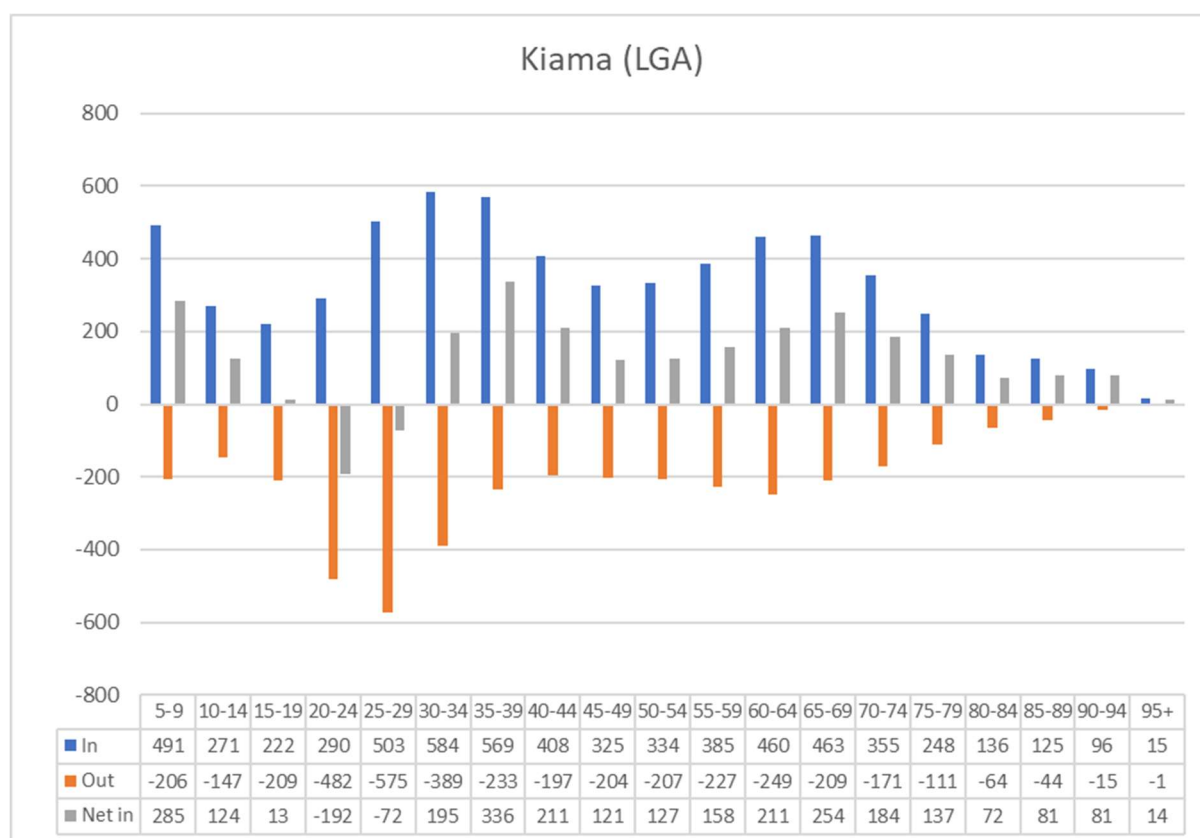


Figure 0-104: Inward, outward, and net migration, by age, Kiama LGA, 2016-2021

Source: JSA 2022, based on ABS Census of Population and Housing 2021, persons, by five-year age group, by place of usual residence at time of census and/or place of usual residence five years ago for selected SA3 and LGA areas.

## Shoalhaven

There was net migration into Shoalhaven SA3 across all age groups except for the 20-24 group. Turnover was highest among those aged 25-29.

Again, there are three peaks visible in the age distribution, corresponding to families, as with the other areas, but with a noticeably higher peak for the 60-64 age group. Net in-migration was higher for the older 60-64 and 65-69 age groups than for the 30-34 age group. This contrasted with the other areas and reflects the Shoalhaven being a popular retirement destination.

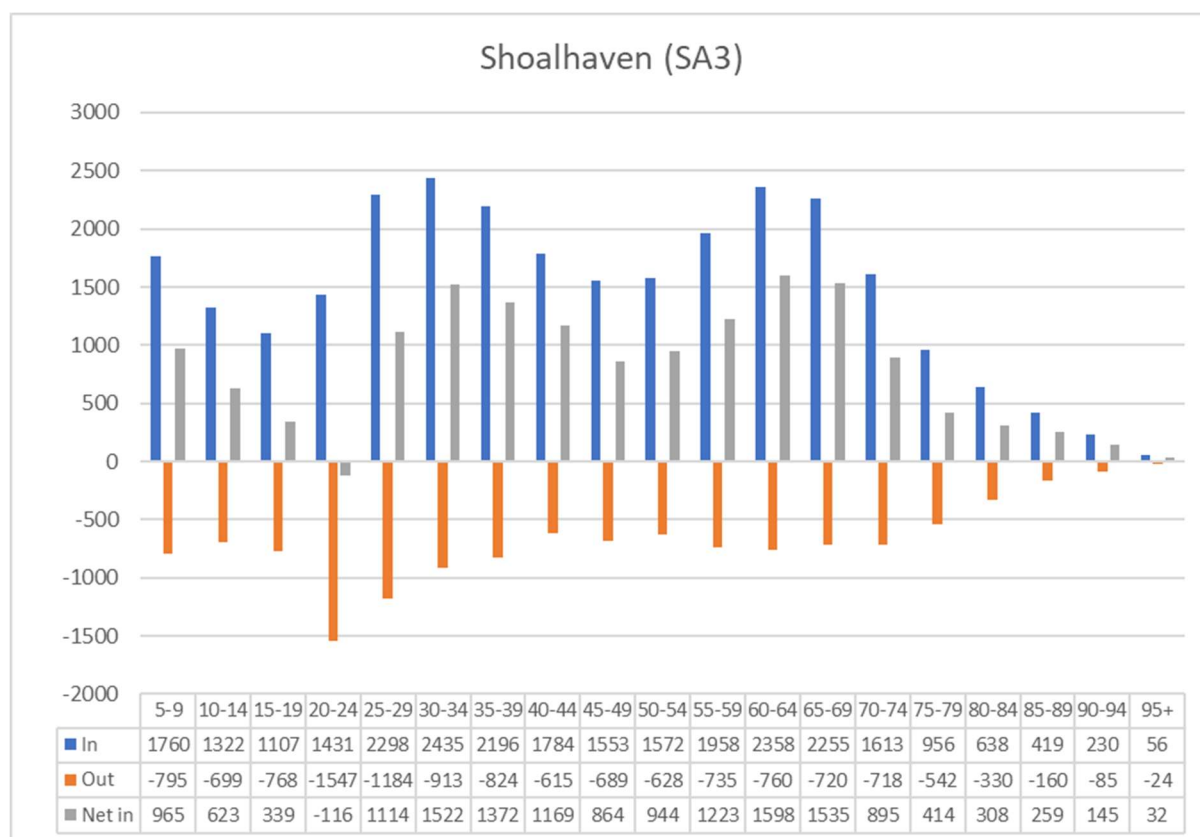


Figure 0-105: Inward, outward, and net migration, by age, Shoalhaven SA3, 2016-2021

Source: JSA 2022, based on ABS Census of Population and Housing 2021, persons, by five-year age group, by place of usual residence at time of census and/or place of usual residence five years ago for selected SA3 and LGA areas.

### 1.12.5 Migration by industry of employment

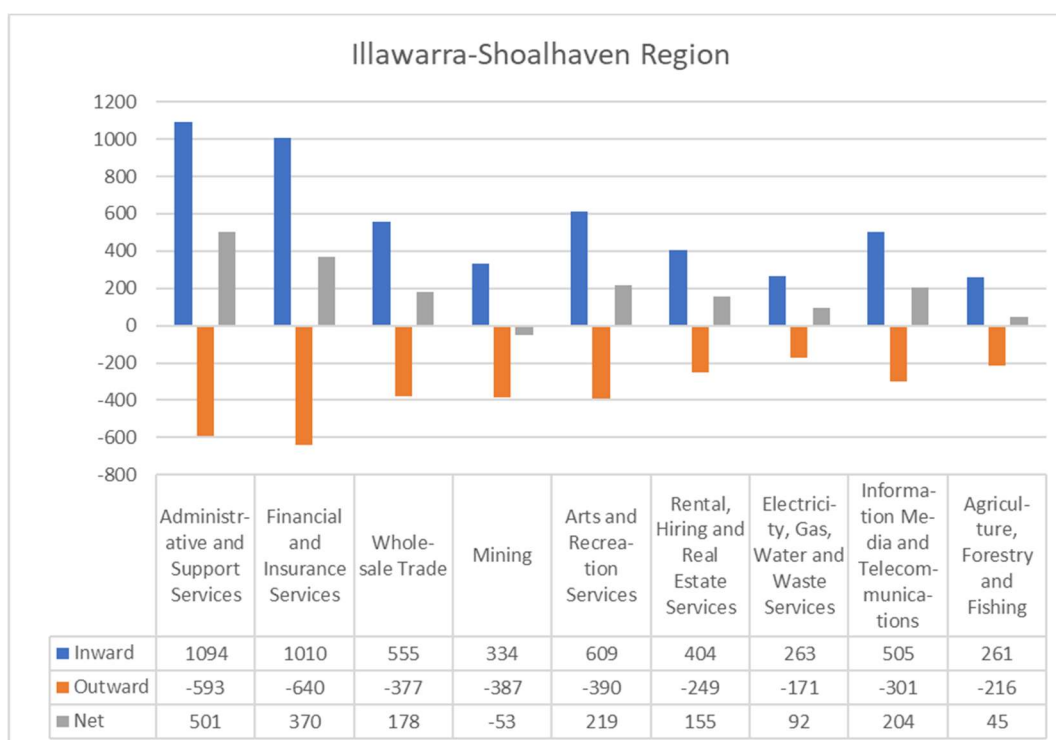
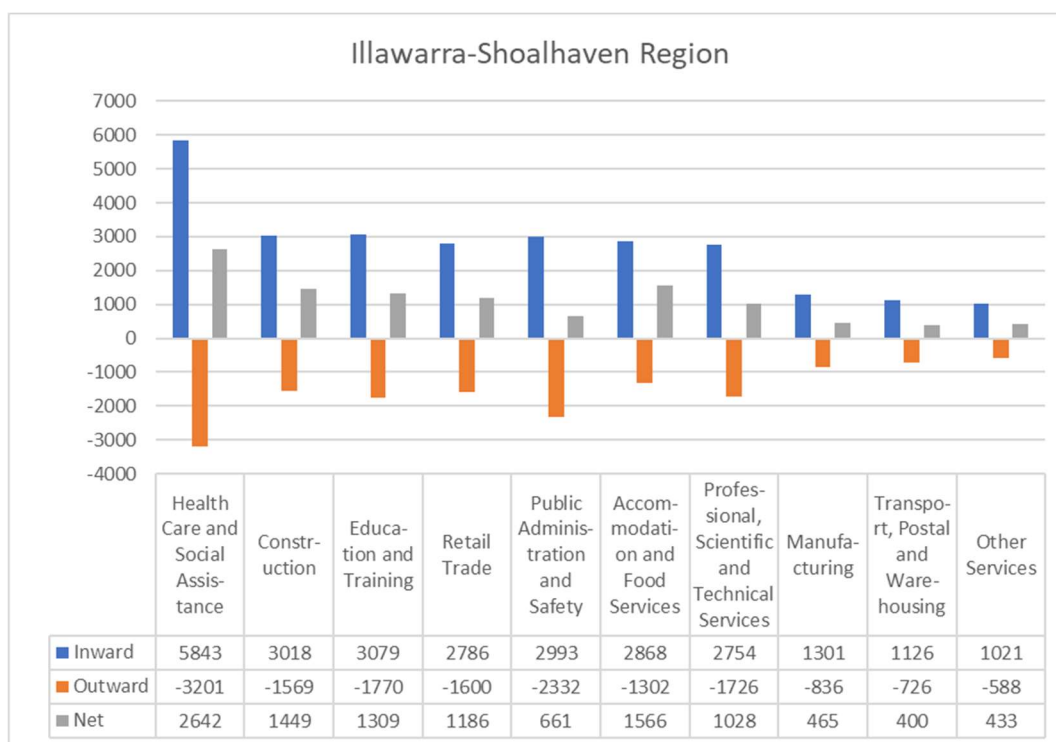
In this section, industries are graphed in order of their size in the ISR. The ten highest are plotted on the first of each pair of graphs and the nine lowest on the second, and the scales for the first is higher than that for the second.

Migration into the ISR was highest in the Health Care and Social Assistance industry, at nearly double that of each of the next six highest industries. Net migration in was correspondingly high for this industry.

Turnover in Manufacturing was low compared to its share of the ISR workforce.

Arts and Recreation Services, and Information Media and Telecommunications, had levels of in-migration that appeared somewhat out of proportion to their rank.

Mining was the only industry in the ISR for which there was a net out-migration of workers.



Figures 0-106: Inward, outward, and net migration, by industry of employment, Wollongong SA3, 2016-2021

Source: JSA 2022, based on ABS Census of Population and Housing 2021, persons, by industry of employment at 1-digit level, by place of usual residence at time of census and/or place of usual residence five years ago for selected SA3 and LGA areas.

## Wollongong

Wollongong SA3 had more in- and out-migration for Education and Training workers. This reflects employees at the University of Wollongong.

Financial and Insurance Services also had a relatively high turnover of workers.

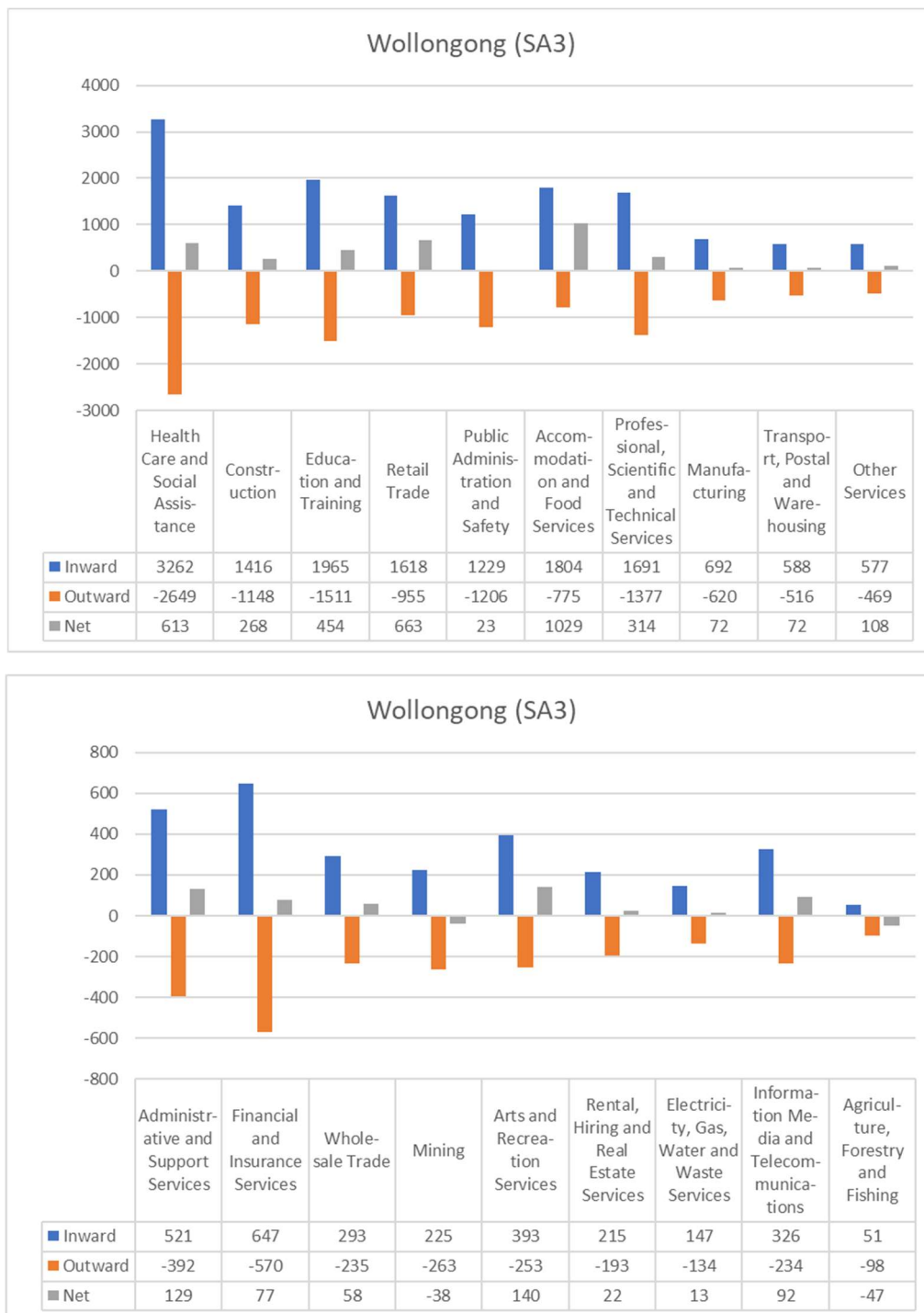


Figure 0-107: Inward, outward, and net migration, by industry of employment, Wollongong SA3, 2016-2021

Source: JSA 2022, based on ABS Census of Population and Housing 2021, persons, by industry of employment at 1-digit level, by place of usual residence at time of census and/or place of usual residence five years ago for selected SA3 and LGA areas.



## Dapto – Port Kembla

Net migration into Dapto – Port Kembla SA3 for Health Care and Social Assistance workers was considerably higher than that for that for any other industry. Turnover among Manufacturing, and Transport, Postal and Warehousing workers in Dapto – Port Kembla was more in proportion to its rank in the industry share of workers than it was for Wollongong. This reflects the industry around Port Kembla and other industrial areas to the south of Wollongong City.

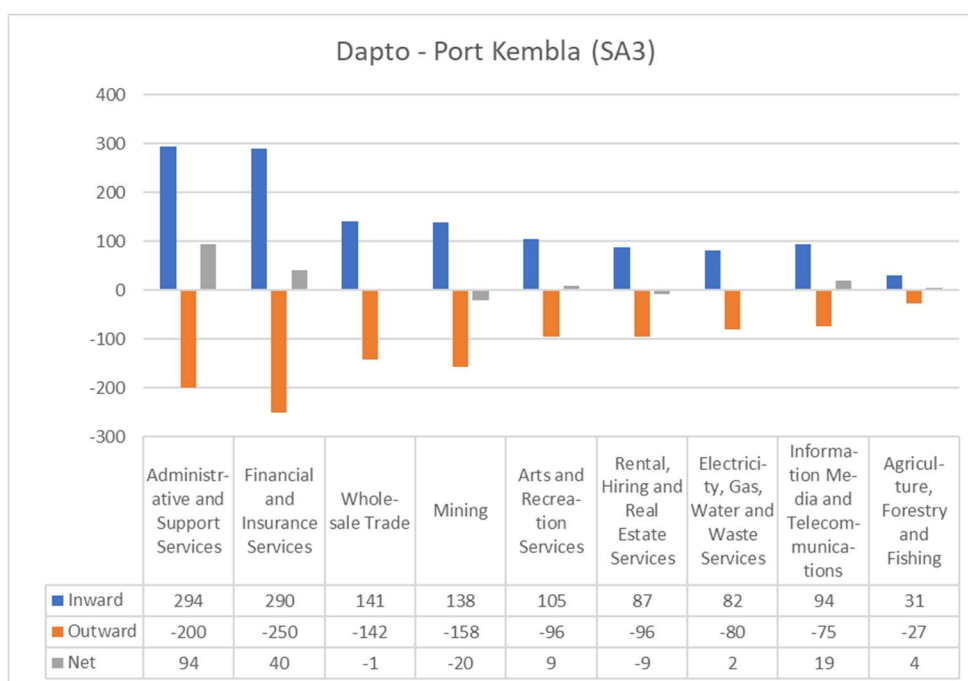
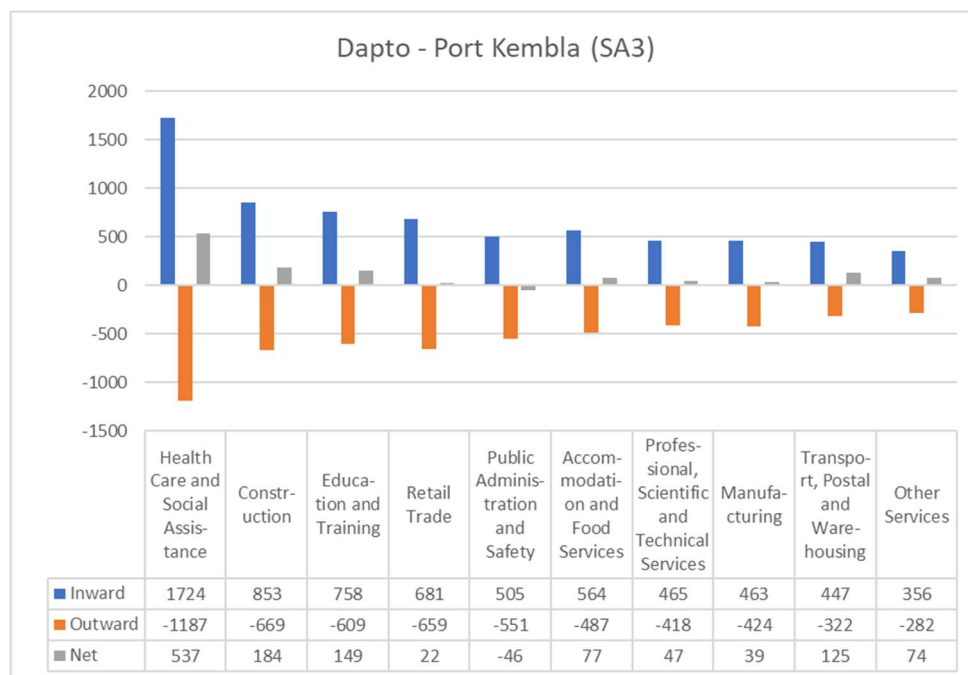


Figure 0-108: Inward, outward, and net migration, by industry of employment, Dapto – Port Kembla SA3, 2016-2021

Source: JSA 2022, based on ABS Census of Population and Housing 2021, persons, by industry of employment at 1-digit level, by place of usual residence at time of census and/or place of usual residence five years ago for selected SA3 and LGA areas.

## Shellharbour

Shellharbour LGA had a peak in in-migration among Retail Trade workers. Apart from this, the amount of in- and out-migration among industries is unremarkable and generally matches the ranked employee share of those industries.

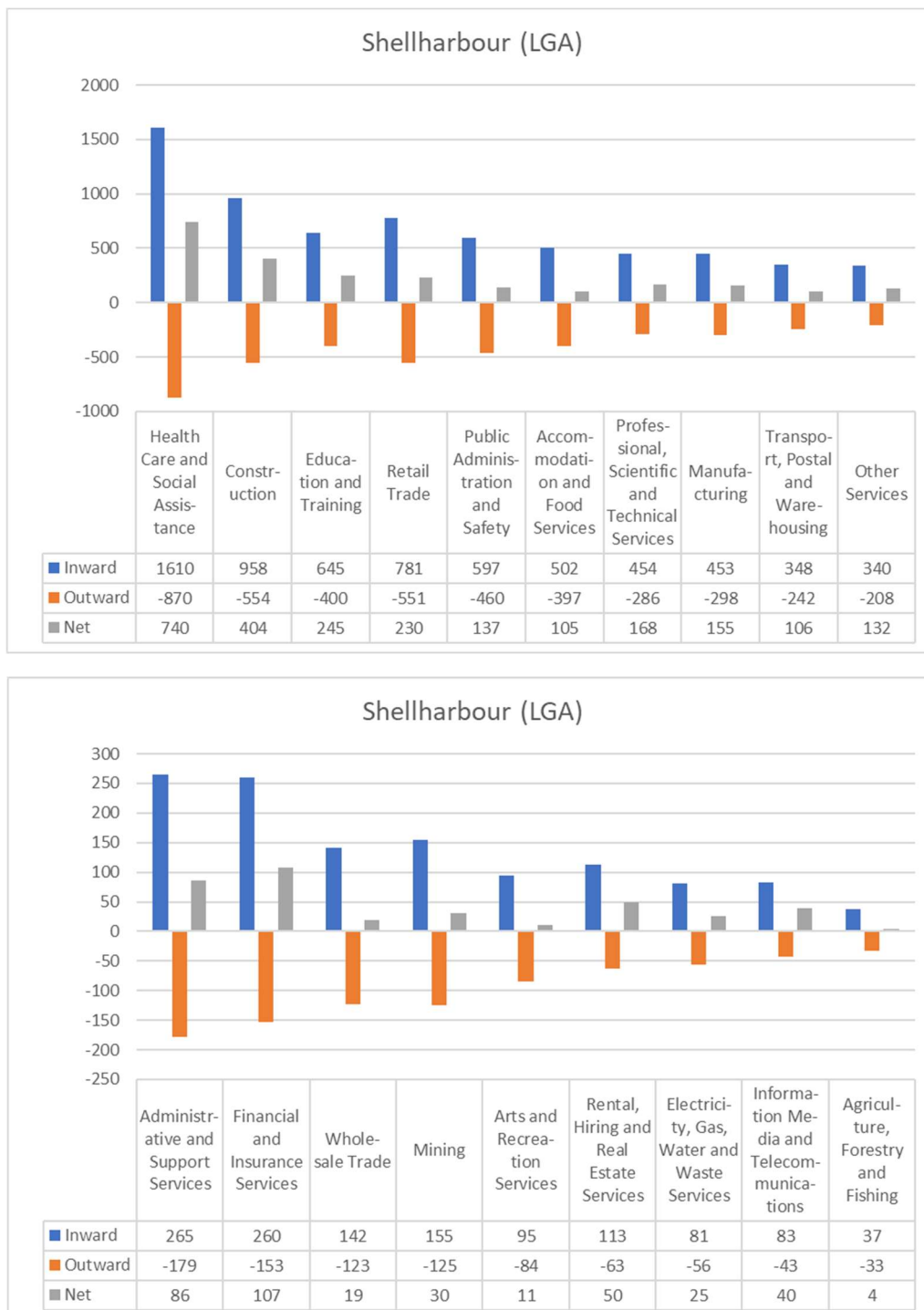


Figure 0-109: Inward, outward, and net migration, by industry of employment, Shellharbour LGA, 2016-2021

Source: JSA 2022, based on ABS Census of Population and Housing 2021, persons, by industry of employment at 1-digit level, by place of usual residence at time of census and/or place of usual residence five years ago for selected SA3 and LGA areas.

## Kiama

Kiama LGA has peaks in in-migration for Professional, Scientific and Technical Services, Financial and Insurance Services, and Information Media and Telecommunications workers compared to their rank in importance in the ISR. This reflects the higher incomes of workers moving into Kiama noted in a previous section.

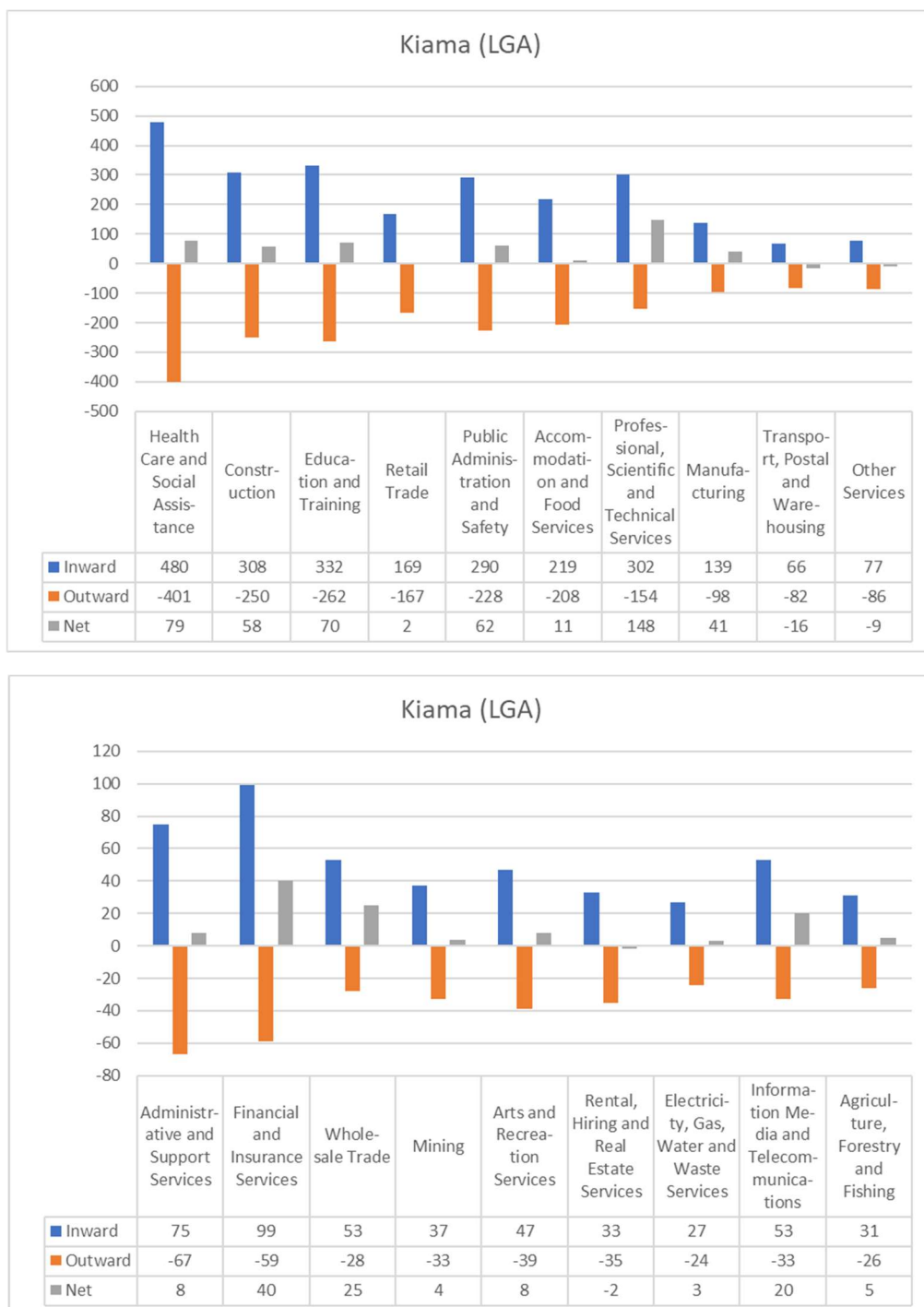


Figure 0-110: Inward, outward, and net migration, by industry of employment, Kiama LGA, 2016-2021

Source: JSA 2022, based on ABS Census of Population and Housing 2021, persons, by industry of employment at 1-digit level, by place of usual residence at time of census and/or place of usual residence five years ago for selected SA3 and LGA areas.

## Shoalhaven

Shoalhaven SA3 had relatively high turnover among Public Administration and Safety workers. Net migration inwards was highest for Health Care and Social Assistance workers.

Shoalhaven has the highest turnover among Agriculture, Forestry and Fishing workers of all the study areas, reflecting its regional character.

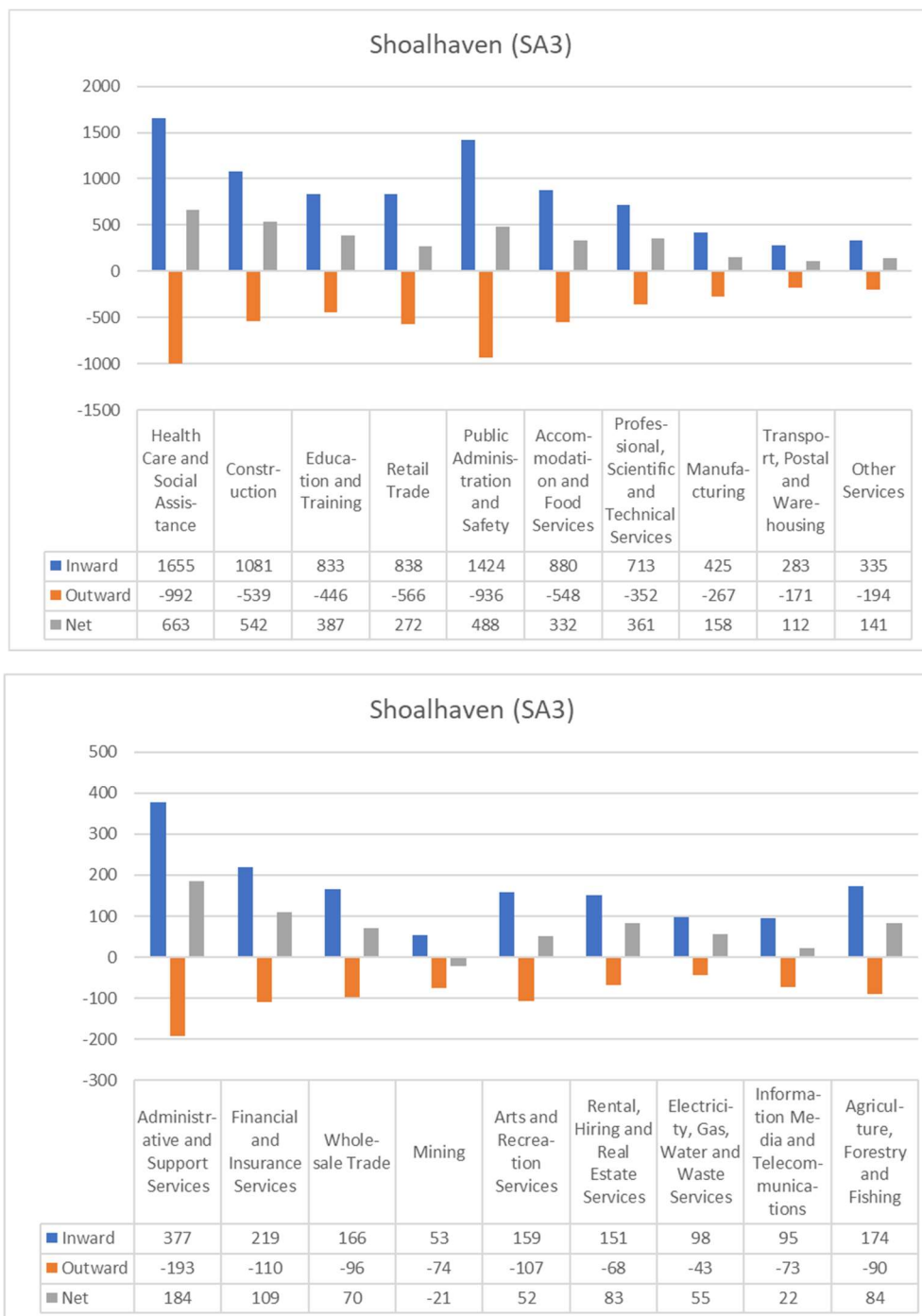


Figure 0-111: Inward, outward, and net migration, by industry of employment, Shoalhaven SA3, 2016-2021

Source: JSA 2022, based on ABS Census of Population and Housing 2021, persons, by industry of employment at 1-digit level, by place of usual residence at time of census and/or place of usual residence five years ago for selected SA3 and LGA areas.

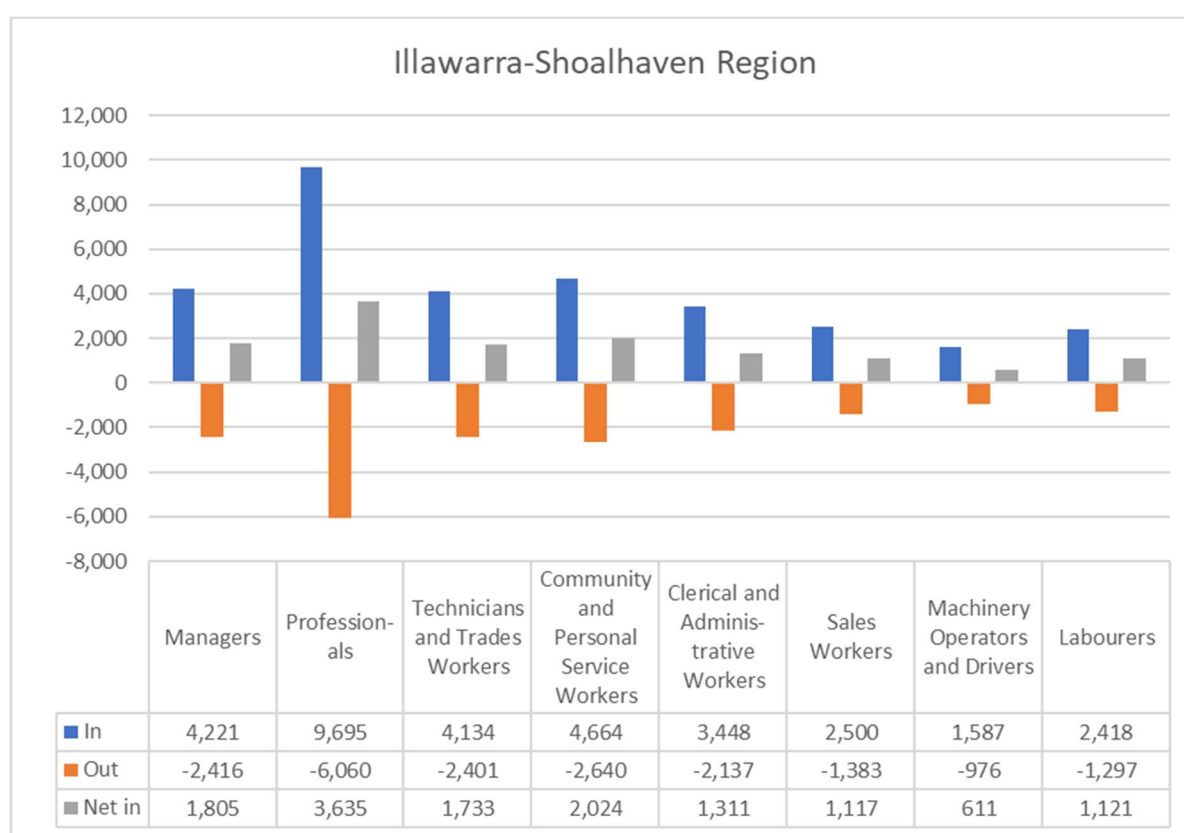
### 1.12.6 Migration by occupation

There was net migration into the ISR across all occupations.

The number of Professionals migrating in was more than double that of the next highest occupation, Community and Personal Service Workers. Similarly, out-migration for Professionals was two-and-a-half times for Community and Personal Service Workers.

Managers, Technicians and Trades Workers, Community and Personal Service Workers, and Clerical and Administrative Workers all had roughly the same level of in-, and out-, and net in-migration.

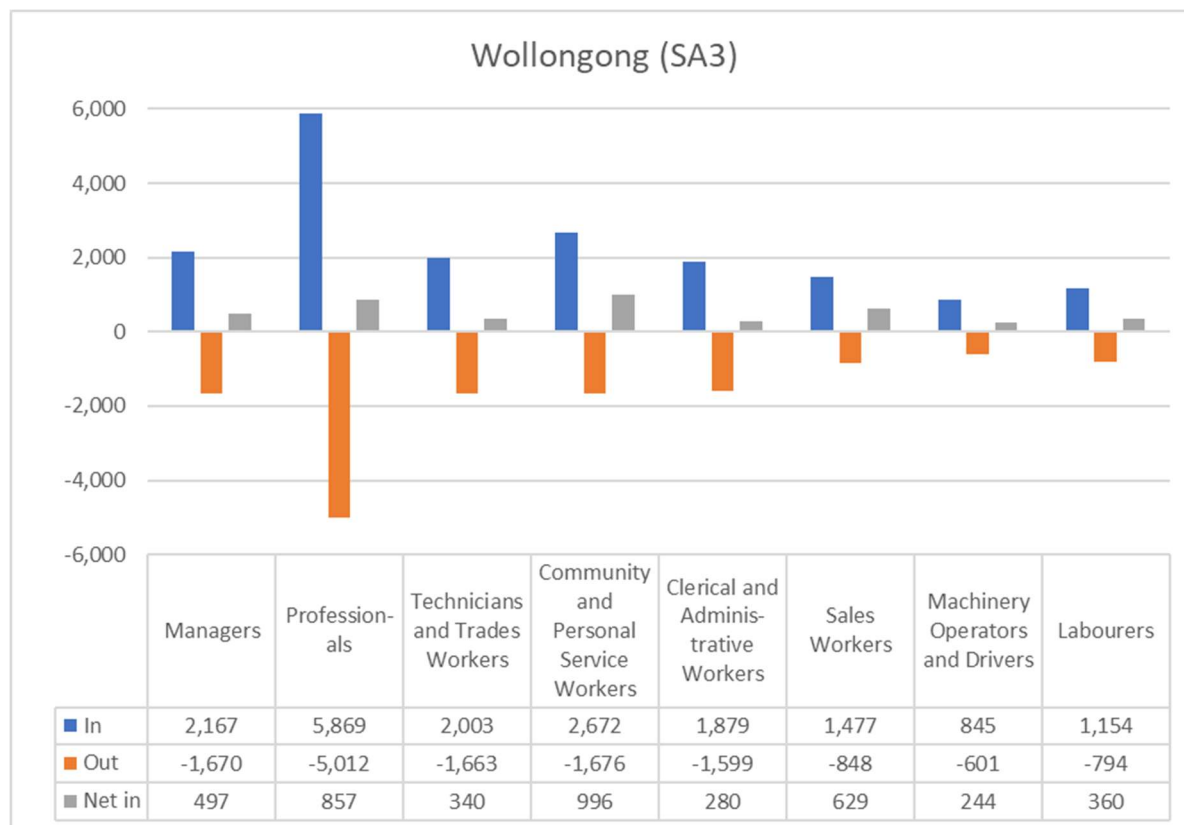
The lowest net-migration into the ISR was for Machinery Operators and Drivers.



## Wollongong

The numbers of workers of different occupations migrating into and out of Wollongong SA3 was almost the same as for the ISR overall, except with more Professionals relative to the other industry groups. Out-migration of this occupation was triple that of the next highest occupation.

Net migration in was highest for Community and Personal Service Workers, especially compared to the turnover of these workers, whereas Professionals had less net in-migration but a much higher turnover.



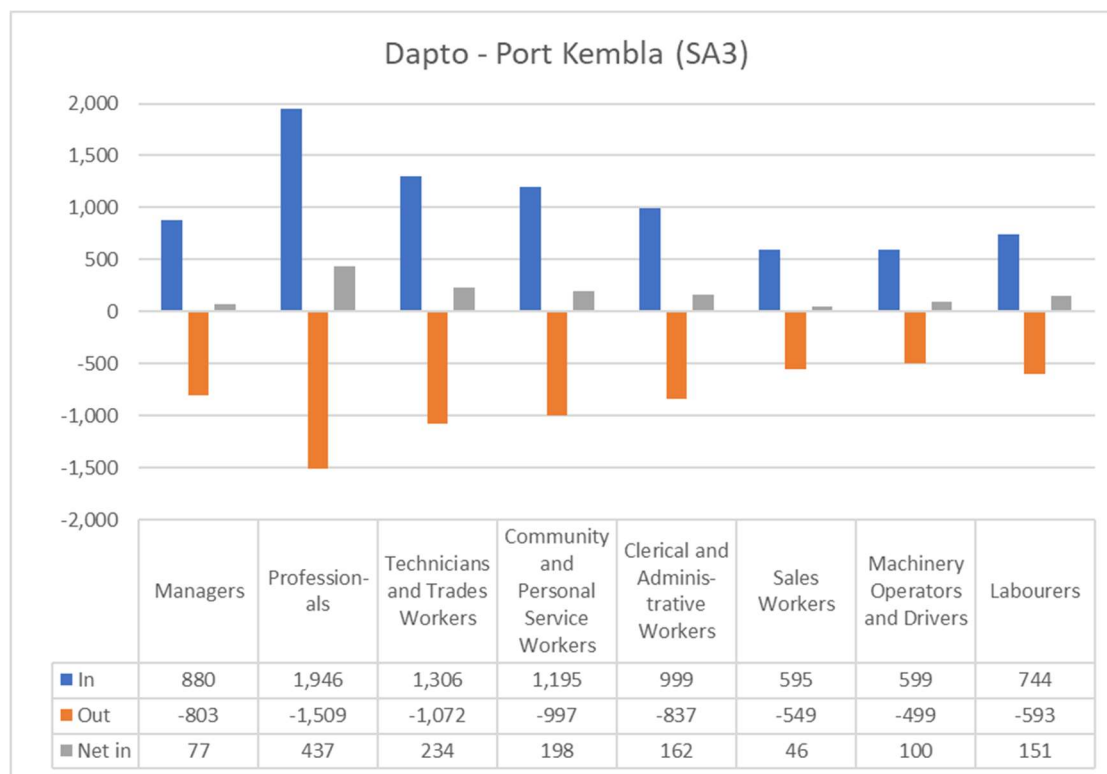
Figures 0-112: Inward, outward, and net migration, by occupation, Wollongong SA3, 2016-2021

Source: JSA 2022, based on ABS Census of Population and Housing 2021, persons, by occupation at 1-digit level, by place of usual residence at time of census and/or place of usual residence five years ago for selected SA3 and LGA areas.

## Dapto – Port Kembla

Dapto – Port Kembla SA3 had relatively less in- and out-migration of Managers, and Professionals (using the ISR as the basis for comparison) and relatively more for the other occupations, particularly Technicians and Trades workers.

Turnover across all occupations was high compared to net migration in. This probably reflects a more stable market for jobs.



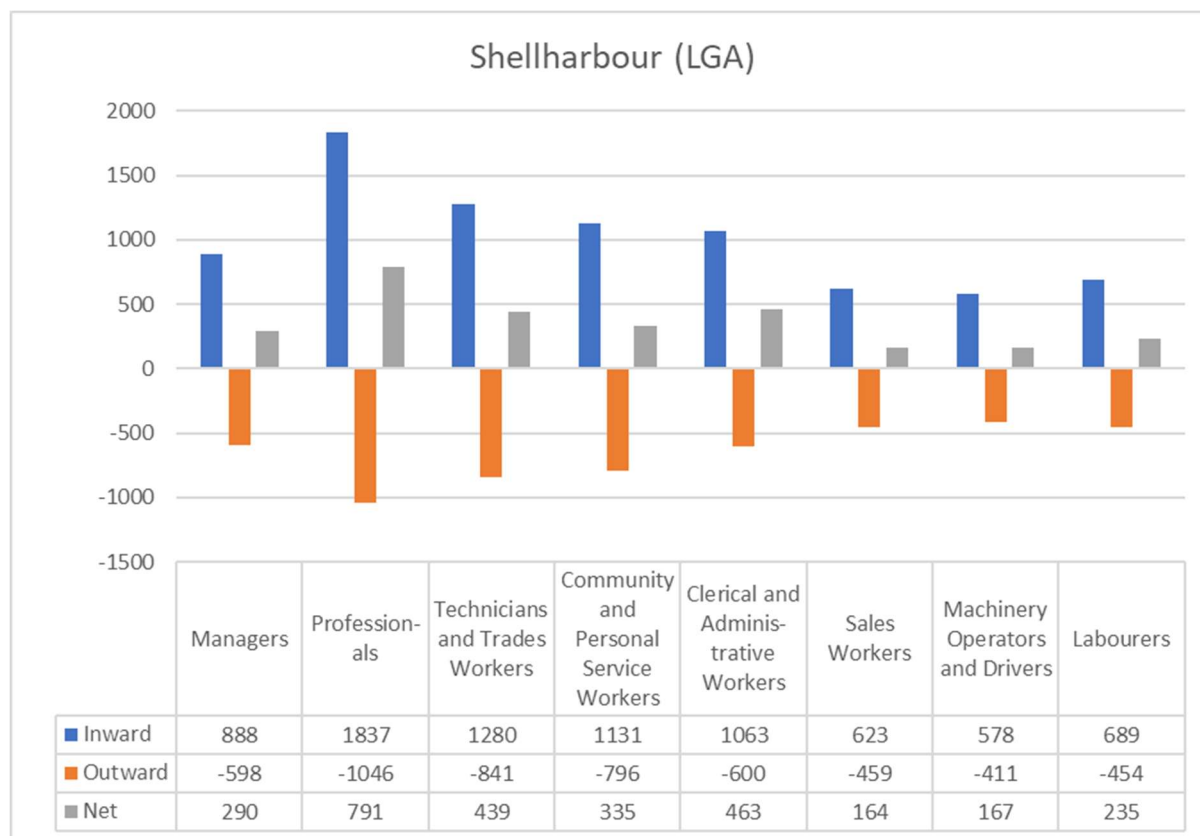
**Figures 0-113: Inward, outward, and net migration, by occupation, Dapto – Port Kembla SA3, 2016-2021**

Source: JSA 2022, based on ABS Census of Population and Housing 2021, persons, by occupation at 1-digit level, by place of usual residence at time of census and/or place of usual residence five years ago for selected SA3 and LGA areas.

## Shellharbour

The occupation profile of workers moving into and out of Shellharbour LGA was like that of Dapto – Port Kembla. Again, there were relatively more Technicians and Trades Workers moving in and out of the area.

Compared to Dapto – Port Kembla, however, there was less turnover of workers for the net amount of migration into the LGA.



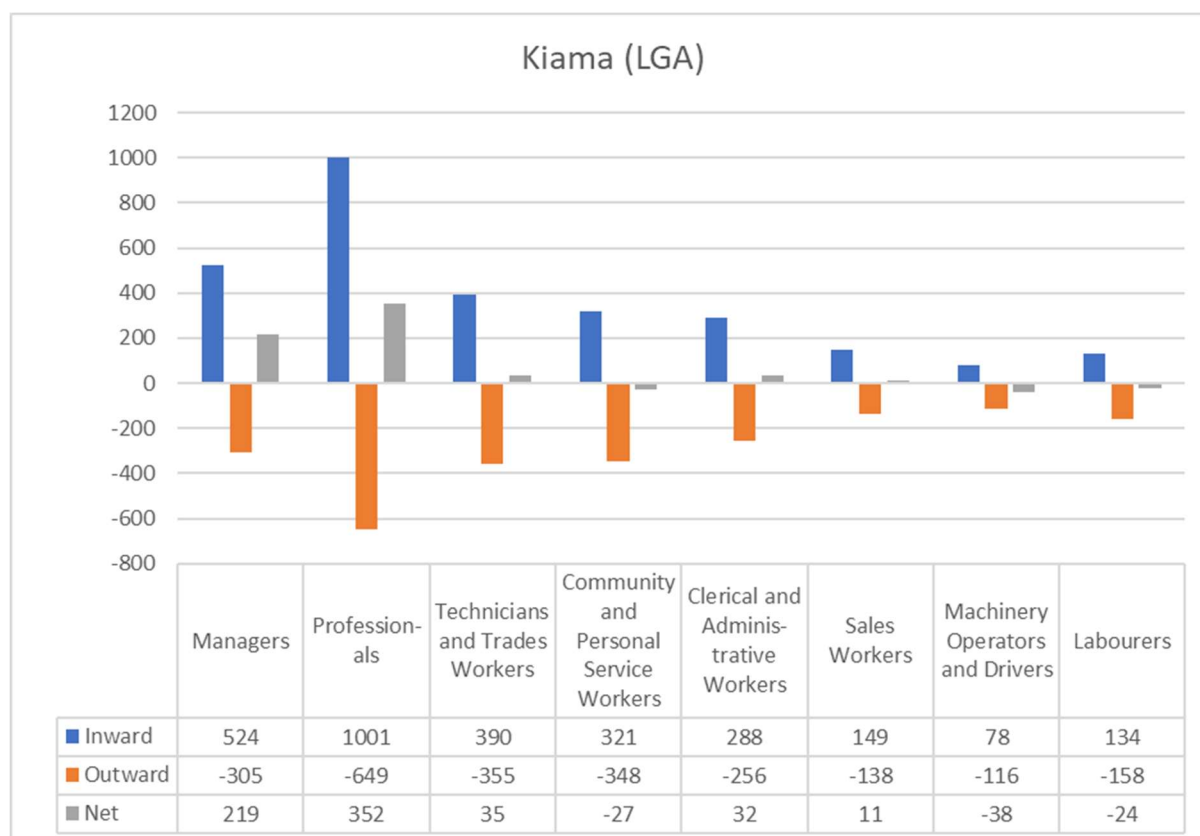
Figures 0-114: Inward, outward, and net migration, by occupation, Shellharbour LGA, 2016-2021

Source: JSA 2022, based on ABS Census of Population and Housing 2021, persons, by occupation at 1-digit level, by place of usual residence at time of census and/or place of usual residence five years ago for selected SA3 and LGA areas.



## Kiama

Kiama LGA had a very high net in-migration of Managers (net 220 people in) and Professionals (net 350 people in) compared to all other industry groups, for which net migration was less than 40 either in or out. This reflects the findings in the earlier sections about income and industry of employment.

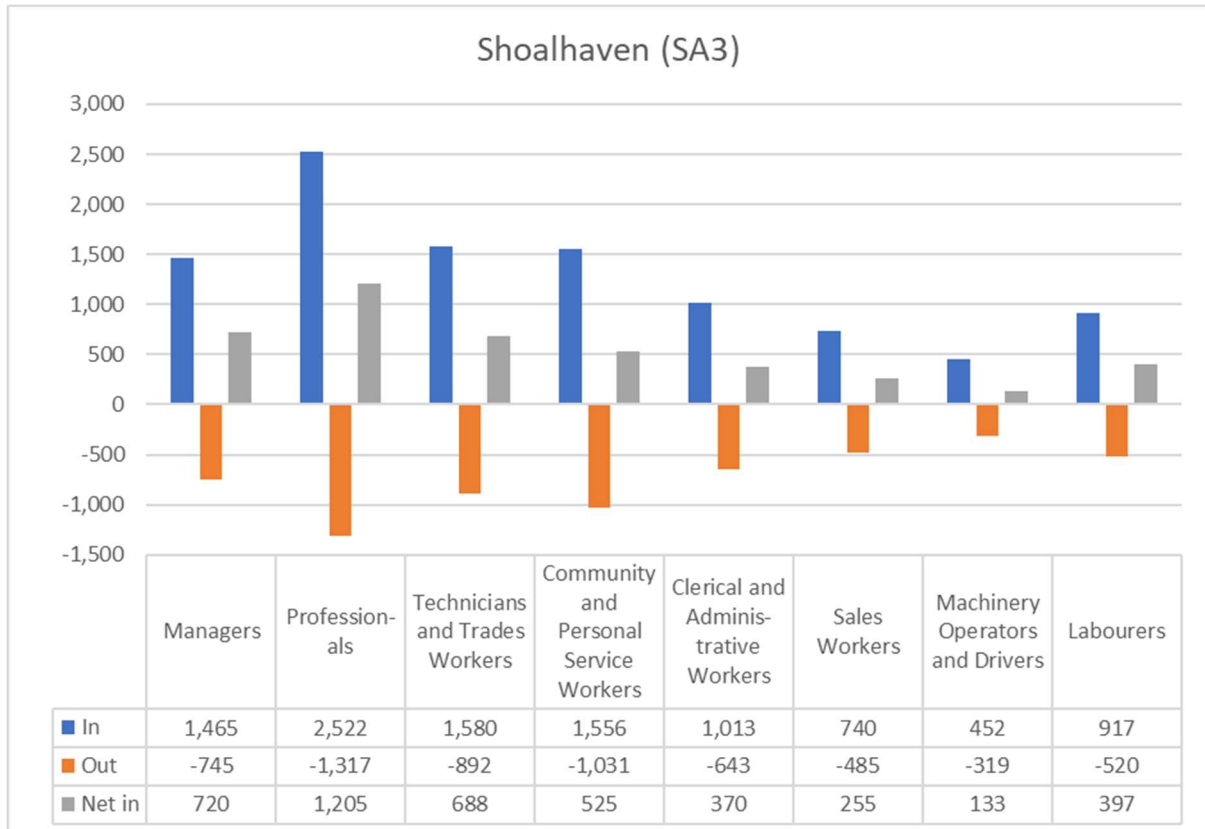


**Figures 0-115: Inward, outward, and net migration, by occupation, Kiama LGA, 2016-2021**

Source: JSA 2022, based on ABS Census of Population and Housing 2021, persons, by occupation at 1-digit level, by place of usual residence at time of census and/or place of usual residence five years ago for selected SA3 and LGA areas.

## Shoalhaven

Shoalhaven SA3 had the highest net in-migration of all the five study areas for Managers, Professionals, Technicians and Trade Workers, and Labourers.



**Figures 0-116: Inward, outward, and net migration, by occupation, Shoalhaven SA3, 2016-2021**

Source: JSA 2022, based on ABS Census of Population and Housing 2021, persons, by occupation at 1-digit level, by place of usual residence at time of census and/or place of usual residence five years ago for selected SA3 and LGA areas.

## 1.13 Journey to work

### 1.13.1 Employed residents who live in the five study areas

Of the 185,000 employed people who lived in the ISR at the time of the 2021 Census, 146,000 (79%) worked within the ISR, 9,000 (5%) had no fixed place of employment, and 30,000 (16%) worked outside the Region. Of those who worked outside the ISR, the vast majority (26,000, or 85% of those who worked outside the ISR) worked in Greater Sydney.

For travel among the five study areas for ISR residents, 53% worked in the same area, 5% had no fixed place of employment, and 42% worked in a different area. Of these 42%, three in five worked within the ISR and two in five worked outside, mostly in Greater Sydney.

Workers tended to travel to nearby areas to work. The further a study area was from Greater Sydney, the fewer workers commuted there: 24% of employed Wollongong residents commuted to Greater Sydney compared with only 4% of employed Shoalhaven residents.

Shoalhaven residents were by far the most likely to work in the same area (82%), followed by Wollongong residents (53%), and then by the residents of the other areas (37%-39% in all cases).

Shoalhaven residents were the most likely to have no fixed place of work (7% compared to 4%-5% for the other study areas).

Table 0.7: Place of work of employed people who live in in the five study areas (number)

Place of work	Wollongong	Dapto – Port Kembla	Shell-harbour	Kiama	Shoalhaven
Wollongong	33,799	10,040	6,713	1,094	467
Dapto – Port Kembla	7,801	13,022	7,341	864	346
Shellharbour	2,702	3,383	12,601	1,280	394
Kiama	362	408	1,202	3,763	410
Shoalhaven	496	446	973	1,303	34,361
Greater Sydney	15,127	4,443	3,357	1,030	1,706
Capital Region	149	38	89	53	545
Southern Highlands	372	226	357	141	171
Balance of NSW	295	91	101	49	130
Balance of Australia	564	184	218	73	767 <sup>4</sup>
No fixed place of work	2,540	1,498	1,547	548	2,860

Source: JSA 2022 using ABS 2021 Census of Population and Housing, persons, by place of usual residence and/or place of work for selected SA3 and LGA areas.

<sup>4</sup> Includes 278 people who lived in Shoalhaven and worked in Jervis Bay.

Table 0.8: Place of work of employed people who live in in the five study areas (percent)

Place of work	Wollongong	Dapto – Port Kembla	Shell-harbour	Kiama	Shoalhaven
Wollongong	53%	30%	19%	11%	1%
Dapto – Port Kembla	12%	39%	21%	8%	1%
Shellharbour	4%	10%	37%	13%	1%
Kiama	1%	1%	3%	37%	1%
Shoalhaven	1%	1%	3%	13%	82%
Greater Sydney	24%	13%	10%	10%	4%
Capital Region	0%	0%	0%	1%	1%
Southern Highlands	1%	1%	1%	1%	0%
Balance of NSW	0%	0%	0%	0%	0%
Balance of Australia	1%	1%	1%	1%	2%
No fixed place of work	4%	4%	4%	5%	7%

Source: JSA 2022 using ABS 2021 Census of Population and Housing, persons, by place of usual residence and/or place of work for selected SA3 and LGA areas.

### 1.13.2 People who work in the five study areas

There were 153,000 workers captured by the 2021 Census whose place of employment was within the ISR, essentially representing local jobs as well as those who have no fixed place of work. Of these, 146,000 (95%) also lived in the ISR, and 7,000 (5%) lived outside of it, so that a much lower proportion of people commute out of the Region compared with those who commute in to work. Three-quarters of those workers commuting to the ISR commuted from Greater Sydney.

Considered individually, 64% of people who worked in one of the five study areas also lived in that area, and 36% lived in a different area. Of these 36%, 87% lived in an area within the ISR, and 13% lived in an area outside of the ISR, mostly Greater Sydney.

ISR workers tended to commute from their own area or nearby areas. For Shoalhaven workers, 88% lived in Shoalhaven. For Dapto – Port Kembla workers, 42% lived in Dapto – Port Kembla and 49% lived in either Wollongong or Shellharbour. This likely reflects the industrial character of Dapto – Port Kembla relative to Wollongong and Shellharbour, with more jobs and fewer homes.

Table 0.9: Usual residence of employed people who work in the five study areas (number)

Place of work	Wollongong	Dapto – Port Kembla	Shell-harbour	Kiama	Shoalhaven
Wollongong	33,799	7,801	2,702	362	496
Dapto – Port Kembla	10,040	13,022	3,383	408	446
Shellharbour	6,713	7,341	12,601	1,202	973
Kiama	1,094	864	1,280	3,763	1,303
Shoalhaven	467	346	394	410	34,361
Greater Sydney	2,820	1,045	439	159	759
Capital Region	85	56	34	12	174
Southern Highlands	214	144	93	50	110
Balance of NSW	214	123	60	13	216
Balance of Australia	131	67	27	3	151

Source: JSA 2022 using ABS 2021 Census of Population and Housing, persons, by place of usual residence and/or place of work for selected SA3 and LGA areas.

Table 0.10: Usual residence of employed people who work in the five study areas (percent)

Place of work	Wollongong	Dapto – Port Kembla	Shell-harbour	Kiama	Shoalhaven
Wollongong	61%	25%	13%	6%	1%
Dapto – Port Kembla	18%	42%	16%	6%	1%
Shellharbour	12%	24%	60%	19%	2%
Kiama	2%	3%	6%	59%	3%
Shoalhaven	1%	1%	2%	6%	88%
Greater Sydney	5%	3%	2%	2%	2%
Capital Region	0%	0%	0%	0%	0%
Southern Highlands	0%	0%	0%	1%	0%
Balance of NSW	0%	0%	0%	0%	1%
Balance of Australia	0%	0%	0%	0%	0%

Source: JSA 2022 using ABS 2021 Census of Population and Housing, persons, by place of usual residence and/or place of work for selected SA3 and LGA areas.

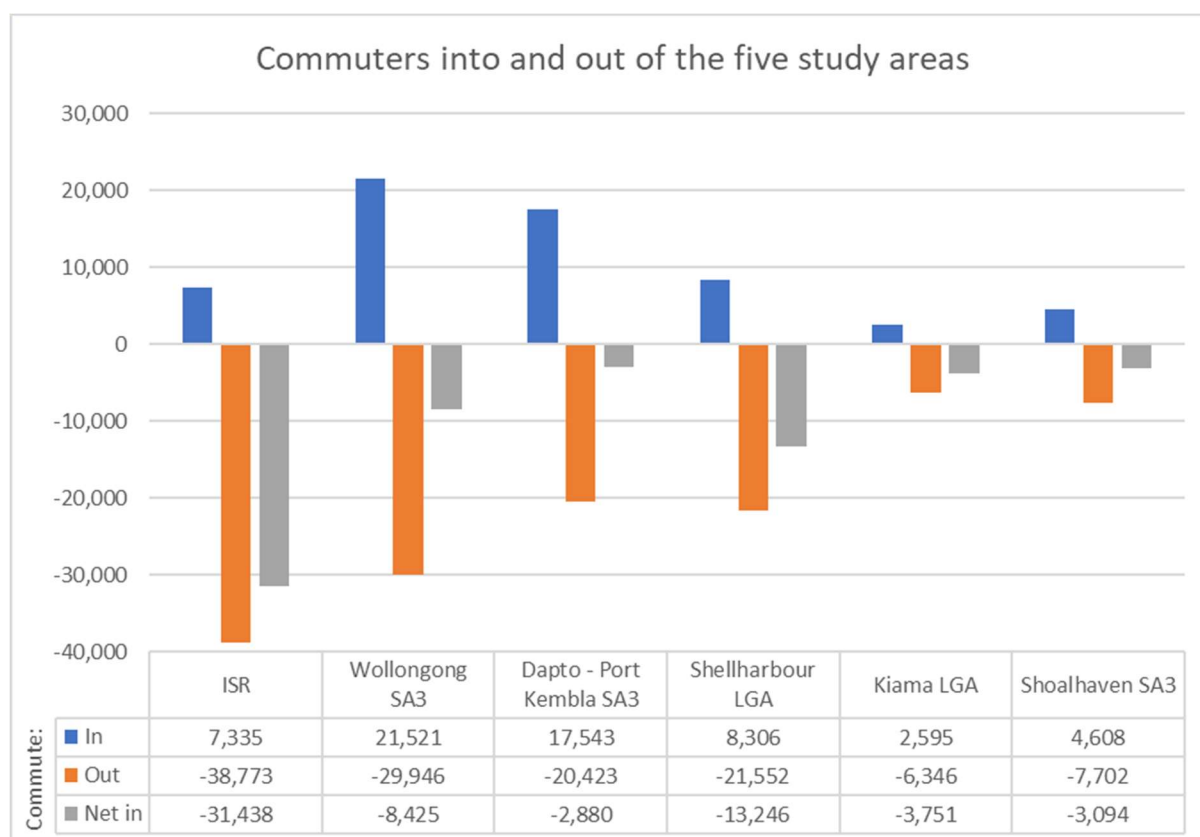
### 1.13.3 Commuters into and out of the five study areas

In 2021, 7,300 workers commuted into the ISR from outside and 38,800 workers commuted out of the ISR from inside, for a net 31,400 workers commuting out.

Broken down by study area, Wollongong had the most commuters in (21,500 workers) and commuters out (29,900 workers). Shellharbour had the largest difference between inward and outward commuting, with a net 13,200 workers commuting outwards. Dapto – Port Kembla had the smallest number of net commuters out, reflecting the industrial nature of this area.

Kiama and Shoalhaven had low numbers of commuters in both directions. This reflects the small population of Kiama relative to the other study areas, and the distance of the two, especially Shoalhaven, from major commuting destinations such as Greater Sydney.

ISR in aggregate had more commuters outwards than any of the individual study areas, and fewer commuters inwards than all but Kiama and Shoalhaven. This is because the aggregate measure does not capture commuting between study areas, which makes up most of the commuting in most study areas, but does capture commuting to Greater Sydney, which has many workers commuting to it but few workers commuting from it.



Figures 0-117: Inward, outward, and net commuters, Illawarra-Shoalhaven Region and individual study areas, 2021

Source: JSA 2022, based on ABS Census of Population and Housing 2021, persons, by place of usual residence and/or place of work for selected SA3 and LGA areas.

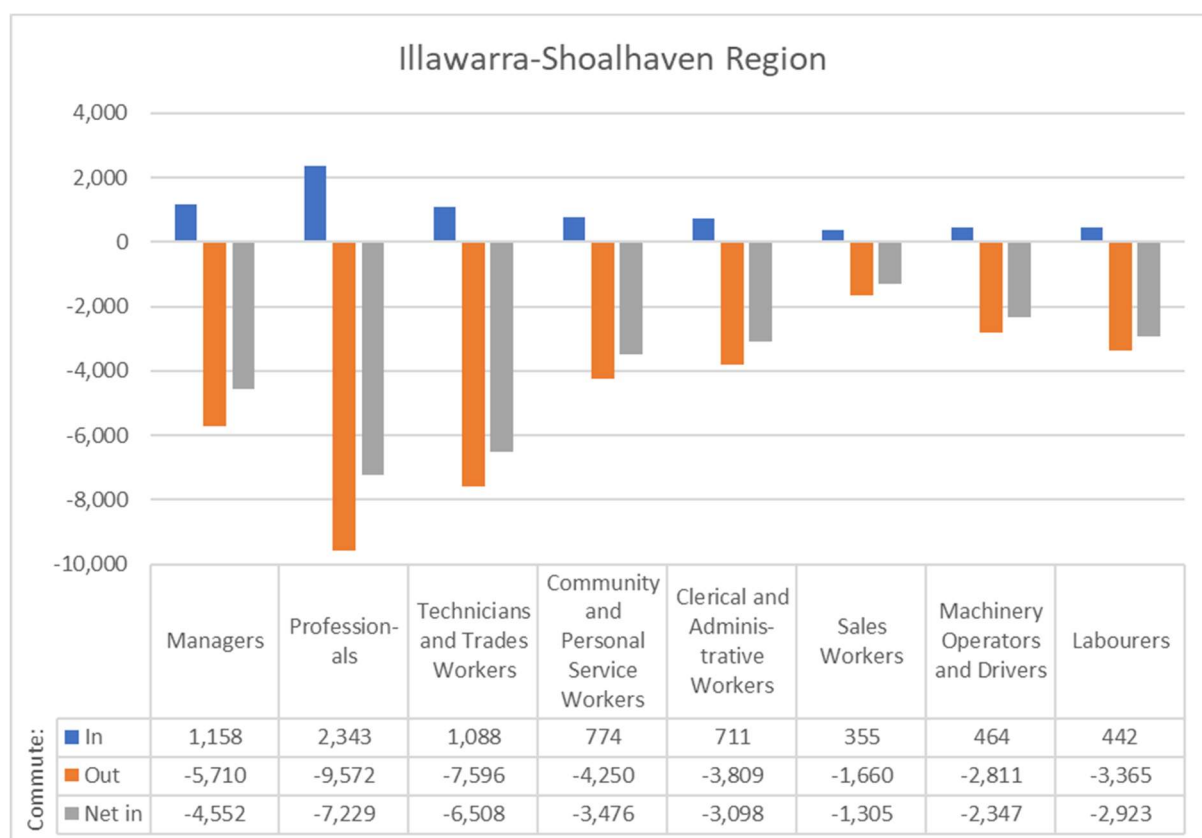
### 1.13.4 Commuters into and out of the five study areas by occupation

The number of commuters out of the ISR was far higher than the number of commuters in across all occupations. This reflects the role of the ISR as a source of workers across all occupations for Greater Sydney.

Professionals were the largest group of workers commuting either in (2,300) or out (9,600), for a net 7,200 workers commuting out. The number of Technicians and Trades Workers commuting out was almost as high (7,600), but with relatively fewer commuting in (1,100).

The next three highest occupation groups for inward and outward commuting were Managers, Community and Personal Service Workers, and Clerical and Administrative Workers. Sales Workers, Machinery Operators and Drivers, and Labourers had the fewest of inwards and outwards commuters.

Sales workers were the smallest share of commuters for the ISR, and tended to be among the smallest share of commuters across the individual study areas.



Figures 0-118: Inward, outward, and net commuters, by occupation, Illawarra-Shoalhaven Region, 2021

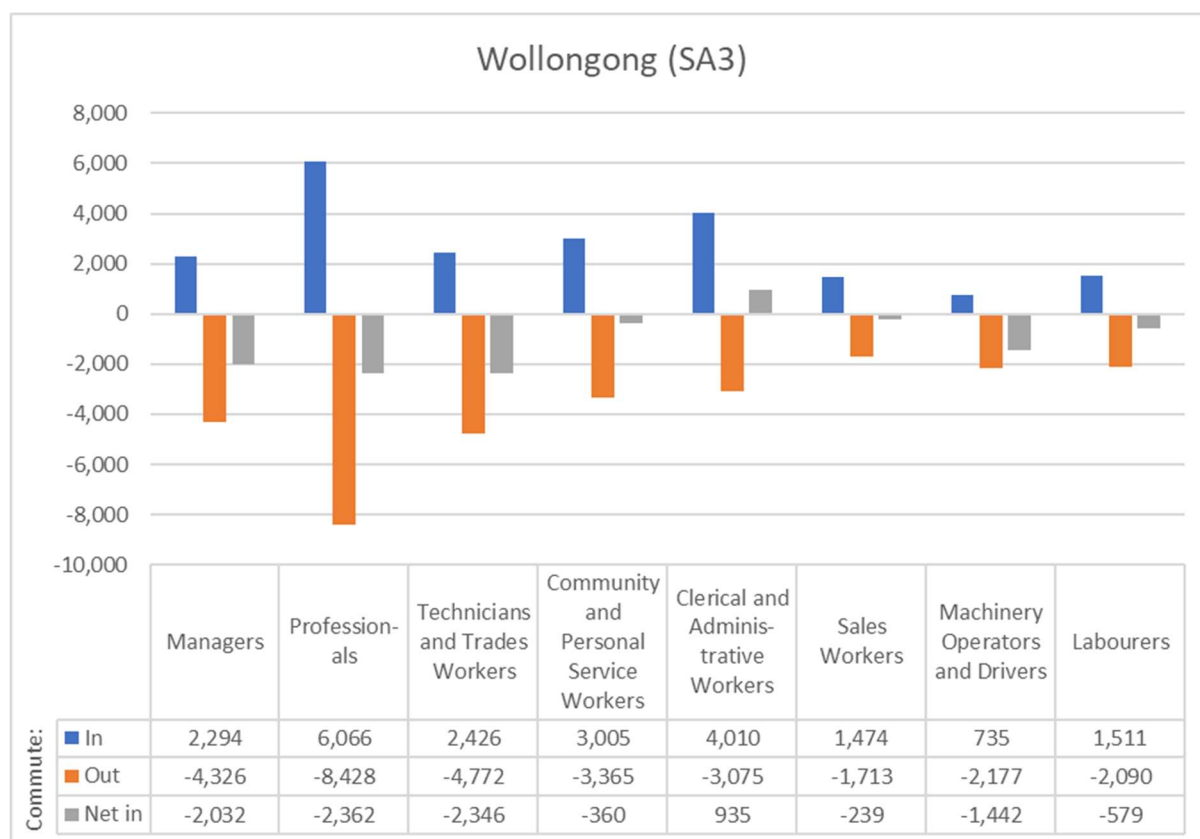
Source: JSA 2022, based on ABS Census of Population and Housing 2021, persons, by occupation at 1-digit level, by place of usual residence and/or place of work for selected SA3 areas.

## Wollongong

Wollongong SA3 had a net 900 Clerical and Administrative Workers commuting into the area. All other occupation groups had net outwards commuting.

There were almost twice as many Professionals commuting out of Wollongong than Technicians and Trades Workers, the next highest group.

Compared to the other study areas, Wollongong had a low net number of Community and Personal Service Workers commuting out relative to other occupation groups.



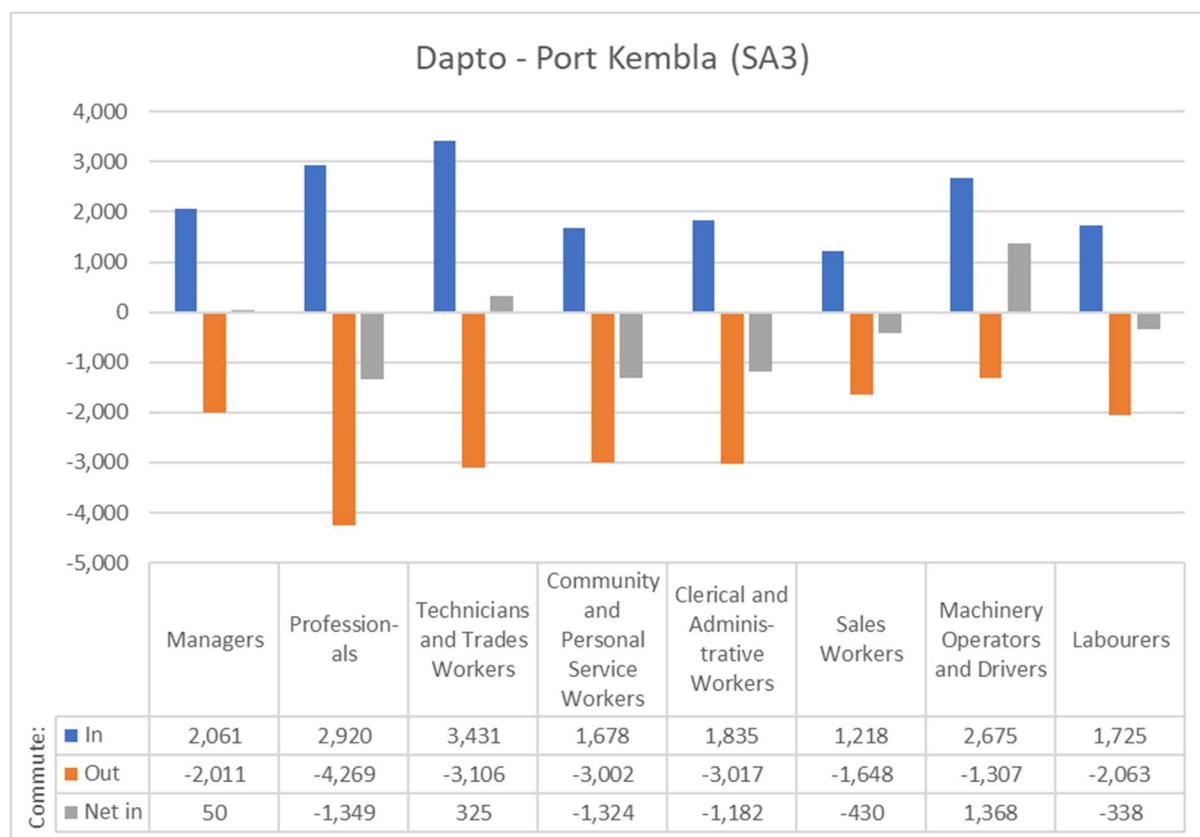
**Figures 0-119: Inward, outward, and net commuters, by occupation, Wollongong SA3, 2021**

Source: JSA 2022, based on ABS Census of Population and Housing 2021, persons, by occupation at 1-digit level, by place of usual residence and/or place of work for selected SA3 and LGA areas.



## Dapto – Port Kembla

Dapto – Port Kembla SA3 had a net number of Machinery Operators and Drivers (1,400), Technicians and Trades Workers (330), and Managers (50), commuting in. This reflects its industrial character.

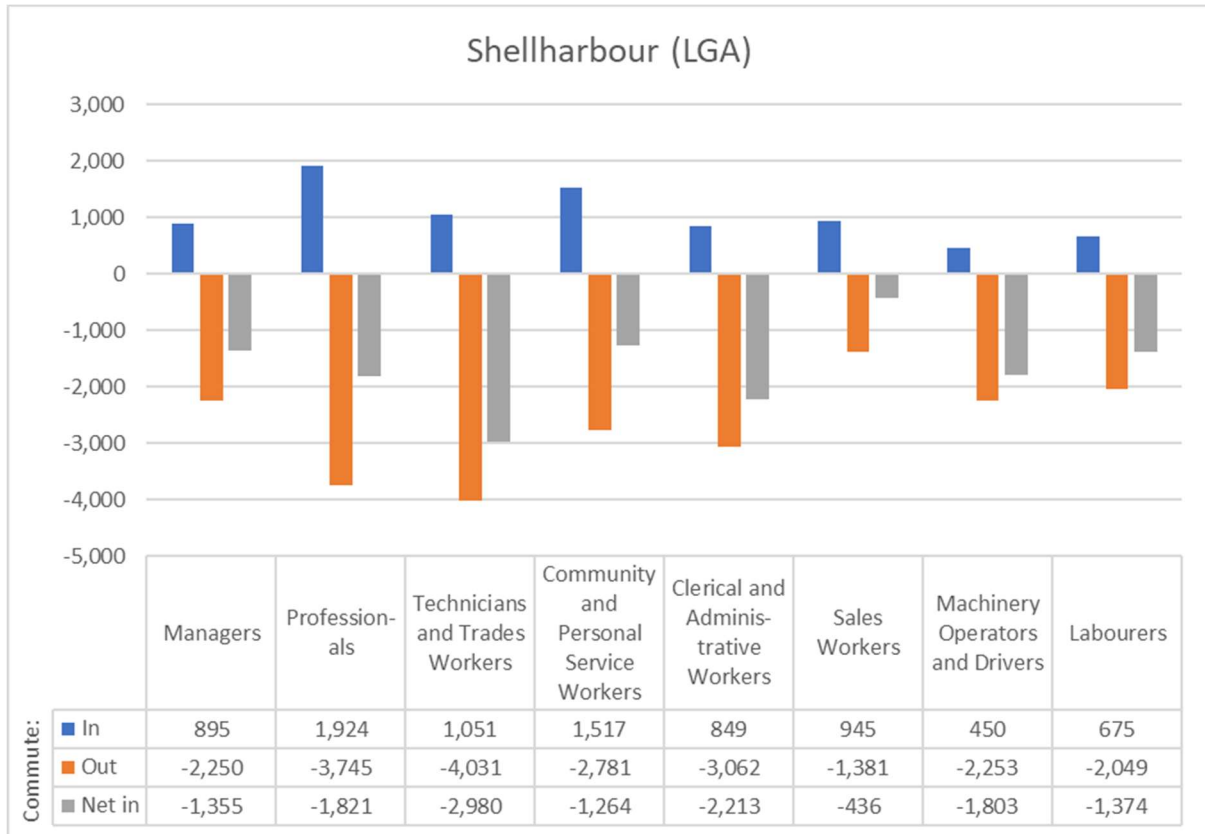


Figures 0-120: Inward, outward, and net commuters, by occupation, Dapto – Port Kembla SA3, 2021

Source: JSA 2022, based on ABS Census of Population and Housing 2021, persons, by occupation at 1-digit level, by place of usual residence and/or place of work for selected SA3 and LGA areas.

## Shellharbour

Shellharbour LGA had a net number of commuters out across all occupations.

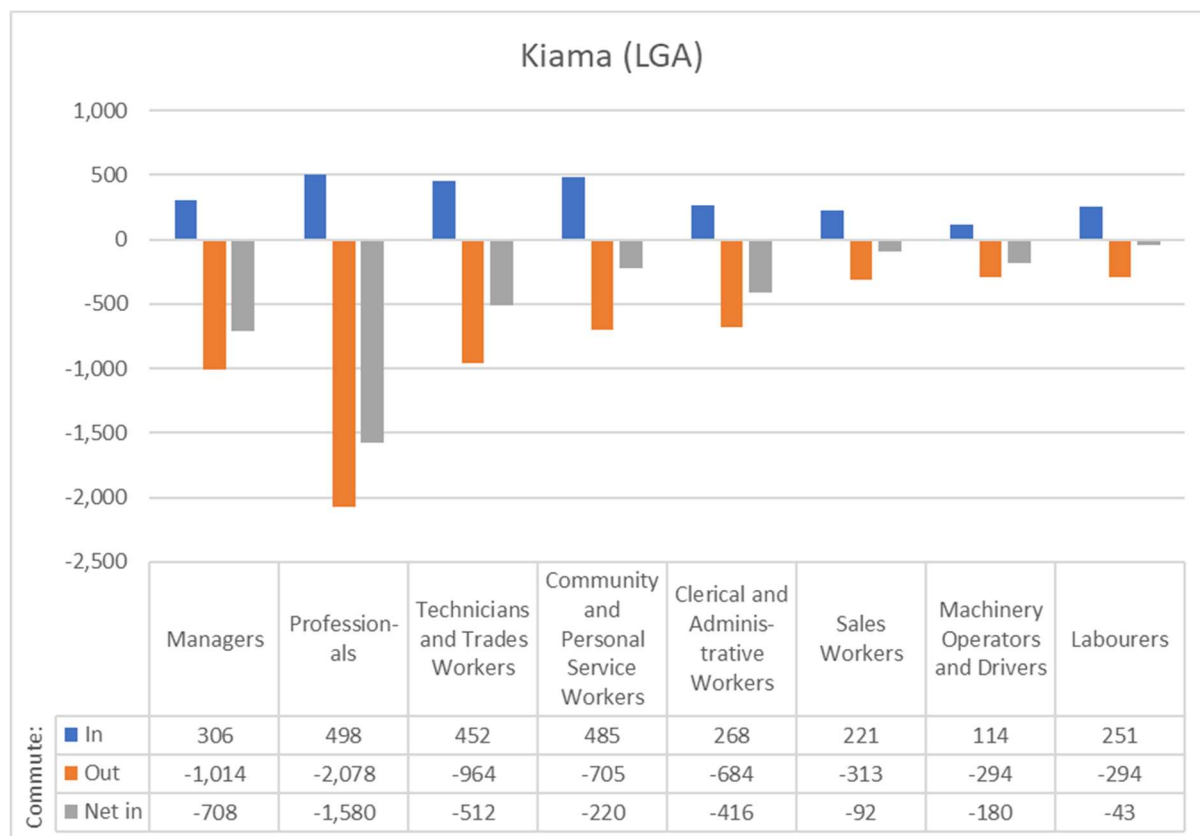


**Figures 0-121: Inward, outward, and net commuters, by occupation, Shellharbour LGA, 2021**

Source: JSA 2022, based on ABS Census of Population and Housing 2021, persons, by occupation at 1-digit level, by place of usual residence and/or place of work for selected SA3 and LGA areas.

## Kiama

Kiama LGA had a net number of commuters outwards across all occupations. The number of Professionals commuting out was high relative to the other study areas.

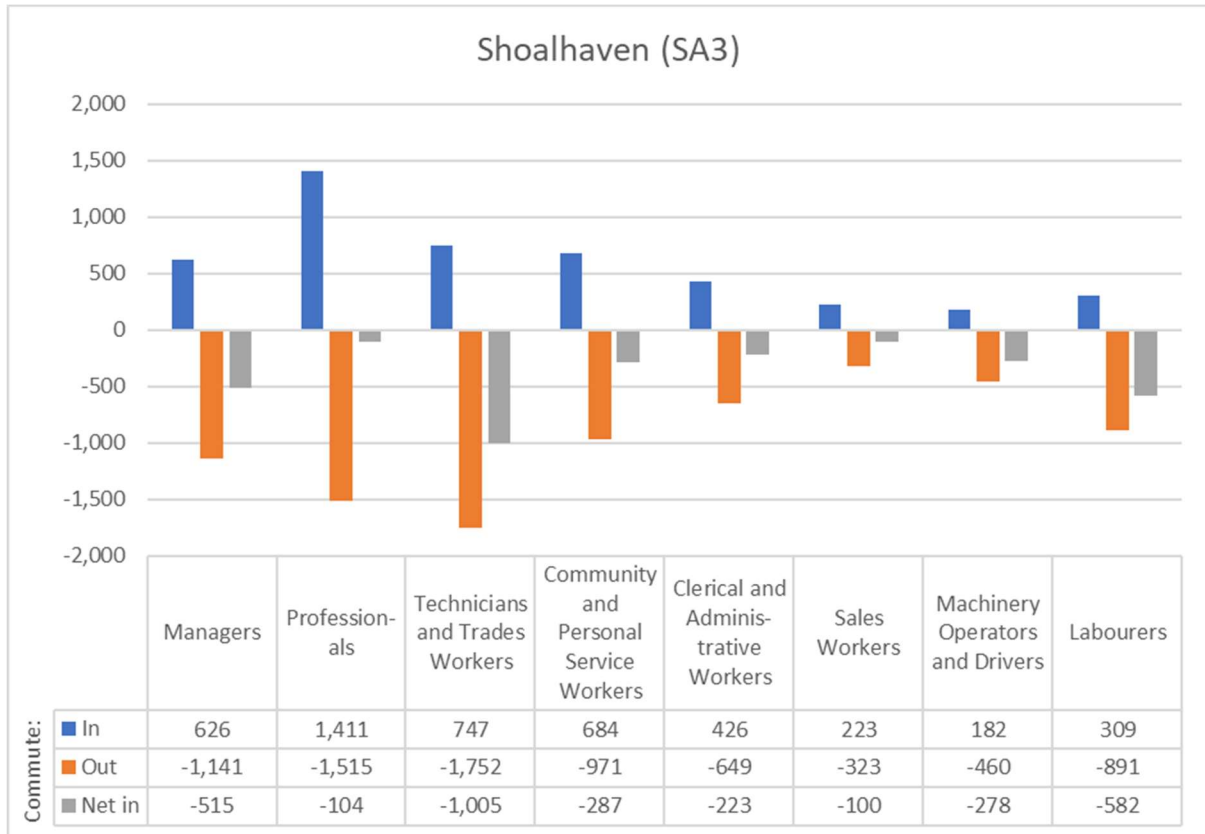


Figures 0-122: Inward, outward, and net commuters, by occupation, Kiama LGA, 2021

Source: JSA 2022, based on ABS Census of Population and Housing 2021, persons, by occupation at 1-digit level, by place of usual residence and/or place of work for selected SA3 and LGA areas.

## Shoalhaven

Shoalhaven SA3 had a net number of commuters outwards across all occupations. Relative to the other study areas, the net number of Professionals commuting outwards was low.



**Figures 0-123: Inward, outward, and net commuters, by occupation, Shoalhaven SA3, 2021**

Source: JSA 2022, based on ABS Census of Population and Housing 2021, persons, by occupation at 1-digit level, by place of usual residence and/or place of work for selected SA3 and LGA areas.