Workforce planning and job growth in Southern Auckland

Tātaki Auckland Unlimited





Akuhata 2024



Contact Tātaki Auckland Unlimited:

Sam Noon

Principal Advisor Māori Outcomes sam.noon@aucklandnz.com

Aldrin Thayalakal

Principal Advisor – Infrastructure & Commercial aldrin.thayalakal@aucklandnz.com

Authors: Diana Russell, Hugh Dixon, Hillmarè Schulze, and Simon Hunt

All work is done, and services rendered at the request of, and for the purposes of the client only. Neither BERL nor any of its employees accepts any responsibility on any grounds whatsoever, including negligence, to any other person.

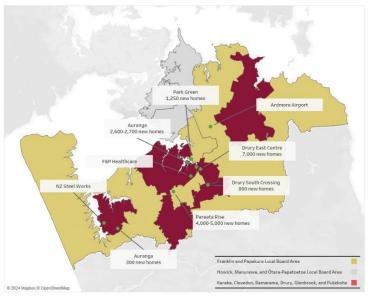
While every effort is made by BERL to ensure that the information, opinions and forecasts provided to the client are accurate and reliable, BERL shall not be liable for any adverse consequences of the client's decisions made in reliance of any report provided by BERL, nor shall BERL be held to have given or implied any warranty as to whether any report provided by BERL will assist in the performance of the client's functions.

©BERL Reference No: #6485 Hūrae 2024

Executive summary

This report looks at nine new developments either underway or in the pipeline for Southern Auckland. These developments include a range of commercial, industrial, retail, and residential areas, which combined are estimated to help generate around one hundred thousand full-time-equivalent jobs (FTEs) for the region. These new jobs for Southern Auckland comprise 33,550-45,935 new direct jobs, 36,286 indirect jobs, and 20,470 induced jobs throughout the wider-Auckland Region (Table 10 and Table 11). Additionally, these eight developers have estimated a need for around 28,000-31,100 short term, contract construction workers (Table 27).

Map of developments in Southern Auckland



Source: BERL analysis

Roughly, 31,700-48,000 of Drury's projected population growth of 60,000 people by 2053 will come from new housing developments¹. Once the population begins to increase, around half of the workforce required will likely reside in Southern Auckland. The remainder will commute from the wider Auckland region and a small proportion will likely commute from the northern Waikato region.

The projected population boom in Southern Auckland presents a unique opportunity, however, it also

requires urgent planning and care. While this growth signifies a vibrant future, this report highlights the need to proactively address skills gaps in key sectors such as construction, education, and healthcare. The skills gaps identified in this report require swift action not only for Auckland but nation-wide. Increasing the population of an area from 5,140 people to 60,000 requires significant physical and social infrastructure. Across the eight developments, a future need has also been identified for a new hospital, general practitioners/family doctors, retirement villages, care homes, primary and secondary schools, and early childhood learning centres. Each of these facilities will require skilled workers in sectors that are already considered understaffed and under resourced. In total, estimates put the number of additional schoolteachers and pre-school teachers required to service a population of 60,000 at 994 and 353-554 respectively. According to the Post Primary Teachers Association (PPTA), secondary teacher shortages are at "crisis point".

Three of the developments, NZ Steel, Fisher & Paykel Healthcare, and Blue Float Energy have indicated workforce planning needs for sourcing skilled and experienced engineers. The findings in

¹ Developer projections based on residential housing build plans.

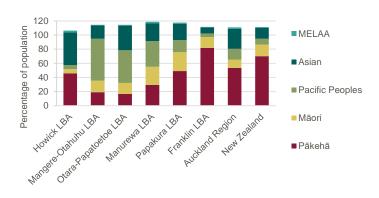


ii

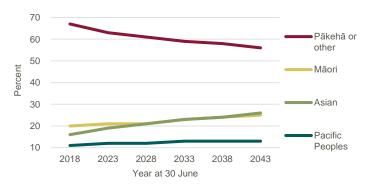
this report should be viewed as a snapshot in time due to the evolving and dynamic nature of these developments, some of which span the next 30 plus years.

The plan for development in Southern Auckland includes the provision for a new regional hospital, however we currently struggle to <u>safely staff</u> our nation's existing hospitals. Estimates for additional health care workers in Southern Auckland sit at around 960-2,500 people, alongside an additional 340 hospital healthcare workers, and a further 150-300 residential care service workers.

Ethnic make-up of Local Boards, Auckland, 2023



Projected change in proportion of ethnic groups for Southern Auckland



Source: Statistics NZ subnational ethnic population projections

Focusing on the growing Māori and Pacific Peoples population is crucial to addressing the skills gap.

Auckland's and South Auckland's Māori populations are experiencing significant growth. Alongside this, Auckland has the largest Pacific Peoples population in the world. This demographic shift presents a valuable resource to fill the upcoming workforce needs in Southern Auckland. Simply relying on population growth will not suffice. We need to ensure the Māori and Pacific Peoples population has the necessary skills and qualifications for these future jobs. Measures should also be taken to addresses the supply and demand gaps in the labour market that are driving workers overseas.



Contents

1	Intro	ntroduction				
2	Plar	ning for growth in Southern Auckland	3			
	2.1	Job growth	3			
	2.2	Overview of the current population in Auckland	4			
	2.3	Case studies of similar and neighbouring localities	10			
3	Plar	ned developments in Southern Auckland	.17			
	3.1	Fisher & Paykel Healthcare in Karaka	17			
	3.2	Auranga housing development in Drury	18			
	3.3	Ardmore Airport industrial and commercial expansion near Clevedon	. 20			
	3.4 Rama	Drury South Crossing industrial, commercial, and residential development ir				
	3.5 deve	Kiwi Property metropolitan centre, Fulton Hogan, and Oyster Capital residentia				
	3.6	Park Green residential development in Papakura/Karaka	. 25			
	3.7	Expansion of NZ Steel works in Glenbrook,	. 26			
	3.8	Paerata Rise residential development between Karaka and Pukekohe	27			
	3.9	Blue Float Energy wind farm off the Waikato Coast	. 29			
4	Proj	ected job growth	.31			
5	Futi	ıre jobs outlook	35			
	5.1	Population growth will not be enough to fill future jobs in South Auckland	. 39			
6	High	and specialist skills needed	.41			
	6.1	Teachers	. 42			
	6.2	Nurses and doctors	. 44			
	6.3	Construction workers	. 48			
	6.4	Engineers	. 50			
	6.5	Engineers in energy related specialties	51			
	6.6	Engineers in healthcare research and development specialties	. 52			



7	Auckland workforce focus - Māori and Pacific Peoples55						
	7.1	Occupation and skill level of the Māori and Pacific Peoples working age population55					
	7.2	Increasing Māori and Pacific Peoples outcomes in key occupations57					
	7.3	Industries of the Māori and Pacific Peoples working age population 60					
	7.4	Increasing Māori and Pacific Peoples outcomes in key industries					
8	Qua	lifications and training in the Auckland region66					
	8.1	Study participation					
	8.2	Workplace based learning – apprentices and trainees					
	8.3	Qualifications of the Auckland region population					
	8.4	Higher education – field of study69					
9	Sun	nmary - workforce planning76					
App	endi	x A Multiplier Analysis – Employment78					
Ann	endi	x B. Southern Auckland 79					



Tables

Table 1	Population by LBA, 2018-2023	4
Table 2	Ethnic make-up of Local Boards, Auckland, 2023 (%)	5
Table 3	Estimates of Auckland's working age population counts by age, Census 2013-2023	6
Table 4	Estimates of Auckland's working age population counts by ethnicity, Census 2013-2023	6
Table 5	Estimates of Auckland's working age population by ethnicity, Census 2013-2023 (%)	6
Table 6	Ethnic population projections for the Auckland region and Franklin and Papakura LBAs	.7
Table 7	Ethnic make-up of select localities, and Auckland region, 2023 Census (%)	10
Table 8	Population estimates for Drury, Karaka, and Botany, 2001-2023	11
Table 9	Ethnic make-up of Drury	11
Table 10	Estimated projected new direct jobs by industry, per development (over the next 30 years)	32
Table 11	Estimated new indirect and induced jobs resulting from the developments over the next 30 years	
Table 12	Estimated, additional health care and education jobs required for a Drury population of 60,0003	34
Table 13	3 Most common roles in Auckland with growing employment outlook over the next five years (%)	}6
Table 14	Most common roles in Auckland with stable employment outlook over the next five years (%)	37
Table 15	Top 8 trends most likely to drive transformation in Auckland organisations (%)	37
Table 16	Top 10 core skills required by Auckland businesses to perform well in key roles with a stable outlook (%)	38
Table 17	ANZSCO occupation skill level ranking and definitions4	41
Table 18	3 2023 employee count for the Southern Auckland education industry4	12
Table 19	Estimated, new additional teaching jobs required for the planned Drury growth4	12
Table 2	O Number of people in the education professional's occupation, by Auckland region and District Health Board (DHB) areas4	ŀ3
Table 21	Number of people in the education professional's occupation, by education industry, for the Auckland region4	ŀ3
Table 2	2 2023 employee count for the Southern Auckland health care and social assistance industry4	ļ4
Table 23	B Estimated, new additional health care and social assistance jobs required for the planned Drury growth4	ŀ5
Table 24	4 Number of people in the healthcare and social assistance occupation, Auckland region4	-6
Table 2	5 Average number of staff required per care facility, 2017-20184	₽7
Table 26	6 Employee count for the Southern Auckland construction industry, 20234	8
Table 27	7 Estimated new additional construction jobs required for developments both planned and underway in Southern Auckland4	18
Table 28	3 Number of people in the construction and labourer occupations, Auckland region4	-9
Table 2	9 Number of people in the construction and labourer occupations, by building and construction related industry, Auckland region5	50
Table 30	Employee count for the Southern Auckland professional, scientific, and technical services	. ^



Table 31 Number of people in the engineering occupations, Auckland region	5
Table 32 Number of people in engineering occupations, by industry, Auckland region	54
Table 33 Working age population, Census 2013-2023, Auckland region	55
Table 34 Median hourly earnings, by occupation and ethnicity, all New Zealand, 2023 (\$)	56
Table 35 Median annual earnings, by occupation and ethnicity, all New Zealand, 2023 (\$)	56
Table 36 Estimates of Auckland's workforce by occupation, Census 2018	57
Table 37 Proportion of occupations by ethnicity, all New Zealand, 2023 (%)	57
Table 38 Māori and Pacific Peoples pay gaps by industry, 2023 median hourly earnings, all N Zealand	
Table 39 Estimates of Auckland region's working age population counts by industry, Census 20)1860
Table 40 Proportion of industry by ethnicity, Auckland region(%)	6
Table 41 Median hourly earnings, by ethnicity, all New Zealand, 2023 (\$)	6
Table 42 Median annual earnings, by ethnicity, all New Zealand, 2023 (\$)	62
Table 43 Māori and Pacific Peoples pay gaps compared to Pākehā, by industry, 2023 median ho earnings, all New Zealand	
Table 44 Skill level of Māori and non-Māori in the education and training industry (%)	65
Table 45 Study participation for all ethnicities, aged 15-34, by LBA (%)	66
Table 46 Field of study by ethnicity, Counties Manukau (%)	70
Table 47 Post-school qualification - select fields of study counts, by ethnicity – Auckland regi	on 7′
Table 48 NZQF qualification level for 2023 student enrolments by field of study (%)	72
Table 49 Breakdown of enrolments in the engineering and related technology field of study. New Zealand, 2023	
Table 50 Breakdown of enrolments in the health field of study, all New Zealand, 2023	74
Table 51 Breakdown of enrolments in the education field of study, all New Zealand, 2023	75
Table 52 Breakdown of architecture and building field of study enrolments, all New Zealand, 2	
Table 53 Summary of all public hospitals in Auckland	
Figures	
Figure 1 Map of developments in Southern Auckland	2
Figure 2 Ethnic make-up of Local Boards, Auckland, 2023	5
Figure 3 projected change in proportion of ethnic groups for Southern Auckland	7
Figure 4 Current industries in Counties Manukau, proportion of total employee count, 2023 (%) 8
Figure 5 Current industries in Southern Auckland, proportion of total employee count, 2023 (%	,) S
Figure 6 Ethnic make-up of select localities, and Auckland region	10
Figure 7 Ethnic make-up of Drury and Drury Rural, Census 2018	1
Figure 8 Proportion of Porirua City workers by place of residence (%)	12
Figure 9 Proportion of NZ Steel workers by place of residence (%)	13
Figure 10 Proportion of East Tāmaki jobs by industry (%)	14
Figure 11 Proportion of Sylvia Park retail trade jobs by industry (%)	15



Figure	Proportion of Sylvia Park office-based jobs by industry (%)	6
Figure	3 An artist's rendering of the future campus1	7
Figure	An artist's rendering of the future Auranga development	9
Figure	5 An artist's impression of Auranga's planned town centre, Sharewater Ngākōroa20	0
Figure	The Master Plan for the Ardmore development2	!1
Figure	7 The Master Plan for the Drury South Crossing development2	2
Figure	3 Map of the three Drury East private plan changes20	4
Figure	Paerata Rise illustrative concept masterplan2	8
Figure	O Current industries in Southern Auckland, proportion of total employee count (%)3	1
Figure	1 The industries of 61 Auckland-based businesses (%)	5
Figure	2 The size of the 61 Auckland Businesses' New Zealand based workforce (%)3	6
Figure	3 Actions that Auckland businesses are very likely to take in the next five years to address a shifting skill demand (%)	8
Figure	4 ANZSCO Occupation skill levels for Auckland, for all ethnicities, Māori, and Pacific Peoples 20235	5
Figure	5 Proportion of occupations by ethnicity, all New Zealand, 2023 (%)5	9
Figure	6 Study participation for people aged 15-34 in the Auckland region, by ethnicity (%) 6	7
Figure	7 Participation in workplace-based learning, all New Zealand 2011-20236	7
Figure	8 Proportion of workplace based learners by type, all New Zealand, 2023 (%)6	8
Figure	9 All apprentices, by location of employment, 2014-20236	8
Figure	0 Qualification level of total Auckland population, by age6	9
Figure	1 Post-school qualification field of study for the Auckland region and Counties Manukau 70	0
Figure	2 Post-school qualification field of study, by ethnicity, for the Counties Manukau DHB7	'1
Figure	3 Proportion of ethnic groups in each post-school field of study, Auckland region7	2
Figure	4 Population of Drury, 2023 admin census (%)8	0



1 Introduction

Tātaki Auckland Unlimited² commissioned BERL to produce a demand assessment and analysis of the employment and skills that will be needed in Drury and Southern Auckland over the next 30 years. Part of this analysis included developing a good understanding of what expansions and new developments are taking place in the area. Drury and the wider Southern Auckland region of Franklin and Papakura are experiencing substantial development activity, and consequently job creation.

This report maps the workforce needs, employment opportunities, and skills and training needs for developments taking place in Southern Auckland. Attention has been paid to the nature of jobs, volume of jobs across time, and the skills and qualification required for the future job needs. Particular attention has been paid throughout the research to Māori and Pacific Peoples employment in the region. This will help inform Tātaki Auckland Unlimited and connected agencies about future training and workforce planning needs in the region. A collaborative approach could be taken by Tātaki Auckland Unlimited, connected agencies, central government, and the community.

Estimates existing prior to this report were that 40-50,000 jobs were being created in the region over the next 20 years. As part of this research, BERL conducted targeted interviews with selected Southern Auckland developments to understand future employment and skills requirements. BERL's estimates place the total number of new jobs that will be generated as a result of the new developments (and projected population growth) at around 90,300-102,700 full-time-equivalents (FTEs). This total number comprises around 33,550-45,935 direct jobs over the next 30 years. Based on the direct job needs, estimates suggest that these developments combined will also generate around 36,300 indirect jobs and 20,500 induced jobs throughout the wider-Auckland region. Currently, the Auckland region provides jobs for 868,800 people³.

There is an opportunity, via targeted upskilling, training, and workforce planning, to increase the representation of Māori and Pacific Peoples in industries that are key to Southern Auckland's growth. If steps were taken to facilitate this uptake, so that Māori and Pacific People are equally represented, it would increase the available Auckland workforce for these industries by:

- 10,240 Māori and 9,270 Pacific Peoples in the professional, scientific, and technical services industry
- 430 Māori and 2,520 Pacific Peoples in the education and training industry
- 28,750 Māori and 28,100 Pacific Peoples in professional and management occupations

At a high-level, the findings explored in this report include that if both the gaps in pay and representation were closed for Auckland's Māori and Pacific Peoples—in the key industries integral to Southern Auckland's growth—it would inject around \$1.8 billion into Auckland's economy each

³ Statistics New Zealand, employee counts from business demographic statistics for 2023.



Introduction

² Tātaki Auckland Unlimited is the council-controlled organisation of Auckland Council that serves as Auckland's economic and cultural agency.

year. The key industries explored are health, education and training, construction, and professional, scientific, and technical services. This report creates a jumping off point from which to bridge the gap between the training, employment, and wages of Pākehā and Māori and Pacific Peoples in the region. This report is designed to better enable engagement between Auckland Council and the region, particularly with Māori and Pacific Peoples communities.

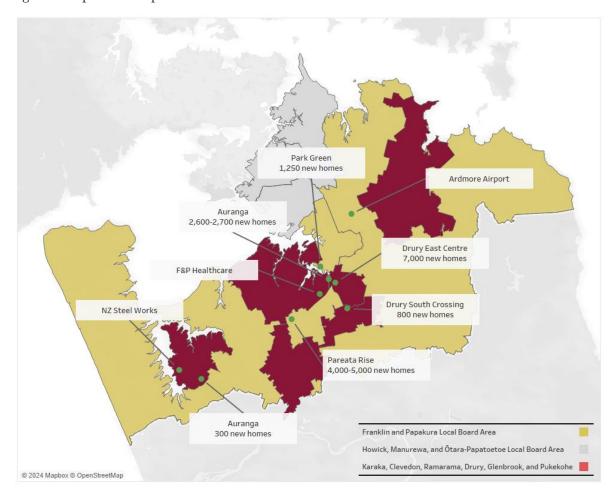


Figure 1 Map of developments in Southern Auckland

Source: BERL analysis

2 Planning for growth in Southern Auckland

Over the next 30 years, Auckland City's population is expected to increase from 1.66 million⁴ to around 2.5 million. As part of this future growth, the population of Drury is expected to grow from 5,140 people to around 60,000. According to Statistics New Zealand, Southern Auckland's population is projected to grow from approximately 160,000 today to 243,000 by 2048 (a 52 percent increase). Roughly 31,700-48,000 of the new population growth in the Karaka/Drury area will come from the new housing developments currently underway and investigated in this report⁵:

- Auranga is planning to build 2,600-2,700 new homes for around 7,000 people by 2027. They also have plans to build around 300 homes in Glenbrook for around 750 people.
- Oyster and Fulton Hogan's planned developments in Drury East (next to Kiwi Property's new Metropolitan Town Centre) include plans to build approximately 7,000 new homes for around 19,000 people by 2032.
- Drury South Crossing is planning to build approximately 800 new homes for around 2,000 people by 2027.
- Paerata Rise, between Karaka and Pukekohe, is planning to build 4,000-5,000 new homes for around 15,000-20,000 people by 2040.
- Fletcher Living is planning to build approximately 1,250 new homes at Park Green in Karaka/ (Papakura LBA) for around 3,700 people (timeline currently undefined).

2.1 Job growth

Across the eight new developments, developers estimate creating between 33,550-45,935 new direct jobs. From the average number of direct job estimates that developers have provided (43,115 jobs), we estimate these developments combined will also generate around 38,100 indirect jobs and 21,800 induced jobs throughout the wider-Auckland region. Therefore, estimates place the total number of new jobs that will be generated for the wider Auckland region at around 110,000 full-time-equivalents (FTEs)⁶.

- **Direct jobs** refers to the direct economic activity generated by the developments. For this report these jobs include those employed by the developers themselves (F&P Healthcare, NZ Steel, and Blue Float), as well as those employed in the facilities built by the developers (e.g., shopping malls, hospitals, retirement villages, schools, and ECE centers).
- Indirect jobs refers to those employed by industries associated downstream and upstream to the industry the supplier firms. These supplier firms in turn, make further

⁶ The volume of employment is usually expressed as full-time equivalents (FTEs). One FTE is equivalent to one full-time employee. One FTE is also calculated as one-third of the number of part-time employees, converted to an annual basis. For example, one FTE is equivalent to three part-time jobs running for a year, or four full-time jobs running for three months.



⁴ 2023 Admin Census population counts

⁵ All these housing developments are already underway, further detail on each is provided later in this report.

- purchases from their suppliers (e.g., legal, accounting, insurance, marketing, transport, communications, and distribution services).
- Induced jobs refers to jobs created in the region as a result of increased economic activity. For example, new job growth created by the new additional spending in the economy by those employed in both the direct and indirect jobs. It can also result from the additional spending in the economy as a result of increased population growth. This could include, for example, retail shops, schools, and medical centres that pop-up elsewhere in Southern Auckland as a result of increased population and demand, that are not directly built by out eight developers.

2.2 Overview of the current population in Auckland

This section provides a breakdown of the current population and labour market for the Auckland region. Emphasis is placed on the two Southern Auckland Local Board Areas (LBAs) of Papakura and Franklin and their neighbouring LBAs in south and east Auckland of Manurewa, Otara-Papatoetoe, Mangere-Otahuhu, and Howick.

2.2.1 Population and ethnicity

Auckland City has a total population of over 1.657 million⁷. The total population of the six Auckland LBAs of interest is around 625,000 people.

Table 1 shows that the Southern Auckland LBAs of Franklin and Papakura account for 10 percent of Auckland's total population. The six LBAs that neighbour southern Auckland (in south and east Auckland) account for 37 percent

Table 1 Population by LBA, 2018-2023

Year at 30 June	2018	2019	2020	2021	2022	2023
Howick LBA	149,400	151,600	154,700	153,200	151,700	157,700
Mangere-Otahuhu LBA	82,700	84,300	85,600	86,100	86,400	98,743
Otara-Papatoetoe LBA	90,500	92,000	93,800	93,400	93,400	96,700
Manurewa LBA	100,900	102,900	105,600	106,500	107,400	110,900
Papakura LBA	61,100	63,400	67,000	69,600	72,200	75,800
Franklin LBA	77,700	79,300	81,200	82,500	83,500	85,300

Source: Statistics New Zealand Subnational population estimates, and 2023 Census

The most common ethnic group in Auckland is Pākehā, comprising 54 percent of Auckland's total population⁸. This is a lower percentage than the total New Zealand population where Pākehā comprise 70 percent of the total population. Table 2 displays each LBA's population, split by ethnicity. Figure 2 shows how diverse south and east Auckland's populations are, particularly in comparison to the national demographic profile.

⁸ Total response ethnic groups means that individuals may identify with multiple ethnic groups, therefore totals can add to more than 100 percent.



⁷ 2023 Census

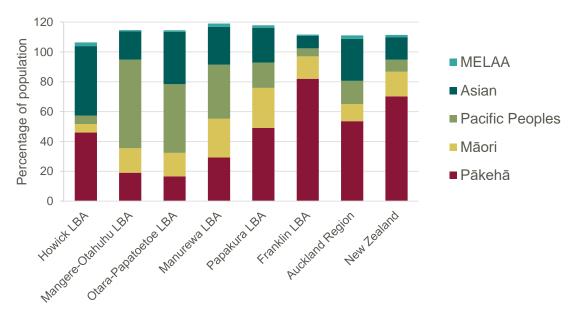
Table 2 Ethnic make-up of Local Boards, Auckland, 2023 (%)

	Pākehā	Māori	Pacific Peoples	Asian	MELAA
Howick LBA	46	6	6	46	3
Mangere-Otahuhu LBA	19	16	59	19	1
Otara-Papatoetoe LBA	17	16	46	35	1
Manurewa LBA	29	26	36	25	2
Papakura LBA	49	27	17	23	2
Franklin LBA	82	15	5	8	1
Auckland Region	54	12	16	28	2
New Zealand	70	17	8	15	2

Source: Statistic NZ subnational population estimates, at 30 June 2023

Pacific Peoples and Māori communities both have a large population within Auckland. Pacific Peoples comprise 16 percent of Auckland's total population, making them the third largest ethnic group behind Pākehā (54 percent) and Asian (28 percent). Māori comprise 12 percent of Auckland's population. The Middle Eastern/Latin American/African (MELAA) ethnic group comprises just over two percent of Auckland's population. The other ethnicity category, which includes all ethnic groups below one percent of the total population, has a total of 15,144 residents, comprising one percent of Auckland's total population.

Figure 2 Ethnic make-up of Local Boards, Auckland, 2023



Source: Statistic NZ admin data 20239

While Pākehā account for 70 percent of the national population, in Otara-Papatoetoe and Mangere-Otahuhu they account for only 17 and 19 percent respectively. Pacific Peoples on the other hand account for 59 and 46 percent of the two LBAs respectively. While the Asian ethnic group accounts

⁹ Total response ethnic groups means that individuals may identify with multiple ethnic groups, therefore totals can add to more than 100 percent.



Planning for growth in Southern Auckland

for 15 percent of New Zealand's total population, in Howick they account for 46 percent of the area's population. It is highly likely that Drury with a population of 60,000 people will have a demographic make-up that more closely resembles Howick and South Auckland, than the national average. Franklin, however, currently has a population of 85,300 people and Pākehā account for 82 percent of the population – higher than the national level. Table 2 shows how different the ethnic profiles of the two Southern Auckland LBA's are. Papakura has much higher Māori, Pacific Peoples, and Asian communities in comparison to the national average. While Franklin has much lower ethnic diversity.

2.2.2 Working age population

According to Statistics New Zealand, at the 2023 Census, there was around 1,117,890 people in the Auckland region of working age (15-64 years) (Table 3). This was an increase of 4.6 percent since the previous 2018 Census.

Table 3 Estimates of Auckland's working age population counts by age, Census 2013-2023

Census year	15–19	20–24	25–29	30–34	35–39	40–44	45–49	50–54	55–59	60–64
2013	102,918	108,222	99,939	98,541	95,538	106,218	102,384	95,112	78,963	68,208
2018	103,695	119,994	133,830	121,842	111,138	101,451	108,405	100,749	91,788	75,813
2023	108,339	112,647	125,952	138,357	128,346	116,211	103,239	105,213	94,635	84,951

Source: Statistics New Zealand 2023 Census population counts released 29 May 2024

Census 2023's total population counts, by ethnicity, shows the number of Pākehā living in Auckland declining in comparison to the 2018 census. This finding has therefore been reflected in Table 4.

Table 4 Estimates of Auckland's working age population counts by ethnicity, Census 2013-2023

Census	Total stated	Pākehā	Māori	Pacific Peoples
2013	956,043	511,200	88,470	117,396
2018	1,068,705	574,000	122,300	163,600
2023*	1,117,890	*556,709	*137,500	*185,570

Source: Statistics New Zealand 2023 Census population counts released 29 May 2024, Census 2018 and Census 2013

*2023 figures are estimates. Official statistics for working age by ethnicity for Census 2023 have not yet been released.

Table 5 Estimates of Auckland's working age population by ethnicity, Census 2013-2023 (%)

	Pākehā	Māori	Pacific Peoples
2013	53.5	9.3	12.3
2018	53.7	11.4	15.3
2023*	49.8	12.3	16.6

Source: Statistics New Zealand 2023 Census population counts released 29 May 2024, Census 2018 and Census 2013

*2023 figures are estimates. Official statistics for working age by ethnicity for Census 2023 have not yet been released.



Ethnic share of Auckland region population projections

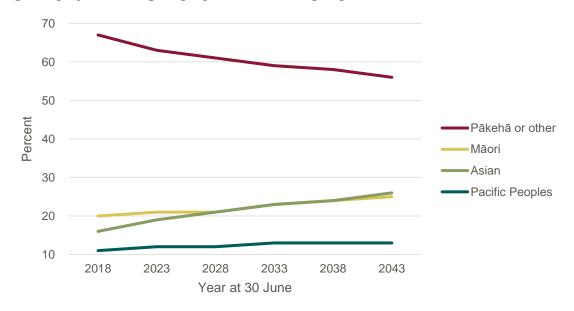
At a national level, Statistics New Zealand estimates that by 2043 the Māori share of New Zealand's population will increase from 17 percent in 2023, to 24 percent in 2043. Statistics New Zealand also estimate that the Pacific peoples and Pākehā share of New Zealand's population will grow from nine and 70 percent respectively in 2023 to 11 and 65 percent respectably by 2043.

Table 6 Ethnic population projections for the Auckland region and Franklin and Papakura LBAs

		2018	2023	2028	2033	2038	2043
	Pākehā	880,300	879,600	885,300	894,500	901,400	905,500
	Māori	190,900	205,700	221,900	238,900	256,500	274,000
Auckland region	Asian	481,900	519,200	591,300	680,700	769,100	858,200
. og.c	Pacific Peoples	260,400	288,100	313,900	340,800	368,000	394,700
	Total population	1,654,800	1,692,400	1,765,500	1,859,400	1,948,700	2,034,100
	Pākehā	29,500	31,900	33,400	34,600	35,600	36,500
	Māori	16,350	19,900	22,200	24,700	27,400	30,300
Papakura LBA	Asian	15,050	22,000	26,100	29,200	32,100	35,200
25, (Pacific Peoples	10,550	13,450	15,150	16,950	18,850	20,800
	Total population	61,100	74,900	81,900	87,400	92,200	96,800
	Pākehā	63,900	68,200	75,500	80,900	86,400	91,800
	Māori	11,800	13,550	15,850	19,550	23,500	27,500
Franklin LBA	Asian	6,880	8,990	11,400	15,350	19,500	23,700
	Pacific Peoples	4,320	5,460	6,220	7,390	8,500	9,540
	Total population	77,700	85,100	95,400	107,100	118,800	130,300

Source: Statistics New Zealand subnational ethnic population projections

Figure 3 projected change in proportion of ethnic groups for Southern Auckland



Source: Statistics New Zealand subnational ethnic population projections

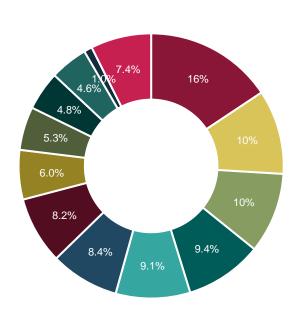


According to Statistics New Zealand's population projections (Table 6), the Māori population for the Auckland region is projected to grow from around 205,700 people in 2023 to 274,000 people by 2043. This growth will take Māori from around 12 percent of the Auckland population to 13 percent. The Pacific Peoples population for the Auckland region is projected to grow from around 288,1000 people in 2023 to 394,700 people by 2043. This growth will take Pacific Peoples from around 17 percent of the Auckland population to 19 percent. The Pākehā population for the Auckland region is projected to grow from around 879,600 people in 2023 to 905,500 people by 2043. This growth will take Pākehā from around 52 percent of the Auckland population to 45 percent.

2.2.3 Industry and employment

Figure 4 shows that the three largest industries in the Counties Manukau District Health Board area (Counties Manukau), by employee count, employ over one third of the areas workforce. The largest industry in Counties Manukau is manufacturing (16 percent), followed by transport, postal and warehousing (10 percent), and health care and social assistance (10 percent). In comparison, the largest industry in Southern Auckland (Figure 5), by employee count, is manufacturing (16 percent), followed by construction (13 percent) and retail trade (12 percent).

Figure 4 Current industries in Counties Manukau, proportion of total employee count, 2023 (%)



- Manufacturing
- Transport, postal, and warehousing
- Health care and social assistance
- Retail trade
- Wholesale trade
- Construction
- Education and training
- Accommodation and food services
- Administrative and support services
- Public administration and safety
- Professional, scientific and technical services
- Agriculture, Forestry and Fishing
- Other

Source: Statistics New Zealand

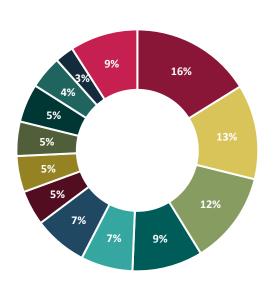
By the time Southern Auckland's planned developments have concluded, it is likely that the industry and employment make-up will hold similarities to Counties Manukau. We make this assumption not

¹⁰ The other category is comprised of industries that employ two percent of less of the areas workforce.



only because Southern Auckland is in Counties Manukau, but also because Counties Manukau includes the very similar developments of Sylvia Park, and the Highbrook business park.

Figure 5 Current industries in Southern Auckland, proportion of total employee count, 2023 (%)



Source: Statistics New Zealand

- Manufacturing
- Construction
- Retail trade
- Education and training
- Health care and social assistance
- Accommodation and food services
- Transport, postal, and warehousing
- Professional, scientific, and technical services
- Administrative and support services
- Wholesale trade
- Agriculture, forestry, and fishing
- Public administration and safety
- Other

2.3 Case studies of similar and neighbouring localities

Other cities in New Zealand with a similar size population include Nelson, Napier, Porirua, and the Botany Electorate. By looking at the jobs and employment make up of similar cities, suburbs, and business parks, we can create a reasonable snapshot of what the Southern Auckland area, including Drury, will look like in 30 years' time when the population reaches its estimated 60,000 people.

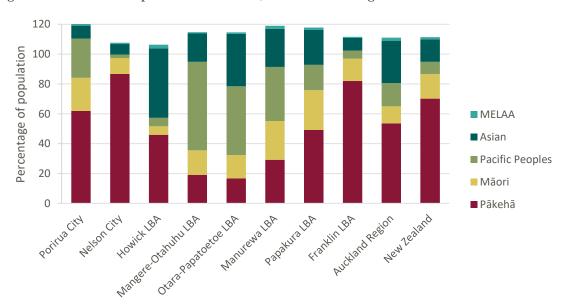


Figure 6 Ethnic make-up of select localities, and Auckland region

Source: Statistics New Zealand

All the neighbouring LBAs of Mangere-Otahuhu, Otara-Papatoetoe, Manurewa, as well as Papakura have high Māori, Pacific Peoples, and Asian populations in comparison to the national average (Table 7). Based on the current demographic profiles of these neighbouring LBAs it is reasonable to assume that the future population of Drury will hold similarities to these five LBAs.

Table 7 Ethnic make-up of select localities, and Auckland region, 2023 Census (%)

Territorial authority and Auckland local board area	Total people	Pākehā	Māori	Pacific Peoples	Asian	MELAA	Other
Auckland	1,656,486	49.8	12.3	16.6	31.3	2.7	0.9
Howick local board area	153,570	38.1	6.3	8	52.5	2.8	1.3
Māngere-Ōtāhuhu local board area	78,642	18.4	16.9	60.4	19.6	1	0.4
Ōtara-Papatoetoe local board area	86,949	14.6	15.8	48.7	35.4	1	0.4
Manurewa local board area	98,784	24.5	25.2	39.9	27.6	2.1	0.5
Papakura local board area	72,318	36.7	24.6	20.5	34.2	1.7	0.9
Franklin local board area	84,357	77	16.6	7.3	12.5	1.1	1.1
Napier city	64,695	79	24.2	4.2	6.5	1	1.3
Porirua city	59,445	60.1	23	26.5	11.5	1.6	0.9
Nelson city	52,584	84.7	11.9	2.8	8.6	1.4	1.3
New Zealand	4,993,923	67.8	17.8	8.9	17.3	1.9	1.1

Source: Statistics New Zealand 2023 Census national and subnational usually resident population counts and dwelling counts



Table 8 Population estimates for Drury, Karaka, and Botany, 2001-2023

Area	2001	2006	2013	2018	2019	2020	2021	2022	2023
Drury West	180	190	190	170	170	190	310	480	700
Drury East	690	780	680	790	800	810	790	830	860
Runciman	680	830	790	840	850	840	820	810	800
Drury South Crossing	400	420	430	350	360	360	360	450	580
Waihoehoe	1,560	1,830	2,030	2,180	2,200	2,210	2,210	2,210	2,200
Botany Electorate	40,860	50,710	58,070	61,920	62,290	63,150	62,020	61,040	62,590
Karaka	3,550	4,090	4,750	6,920	7,140	7,500	7,850	8,090	8,350

Source: Statistics New Zealand subnational population estimates at 30 June 1996-2023 (2023 boundaries)

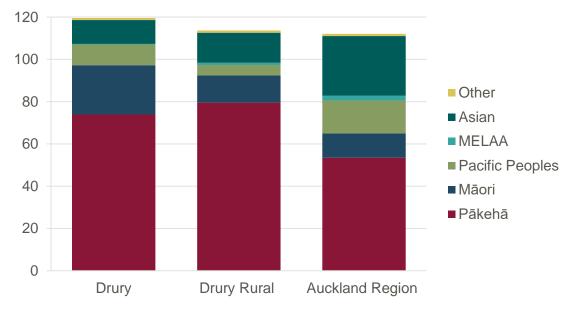
Figure 7 and Table 8 show the ethnic makeup of Drury. It shows that Drury has an ethnic profile similar to the national level, but quite different to the Auckland region (Table 7). Drury and Drury Rural have a Pākehā population of 73.9 and 79.5 percent respectively. In comparison, New Zealand's Pākehā population sits at 70 percent, while the Auckland region sits at 54 percent. Drury has a much higher proportion of Pacific Peoples to the national level (eight percent), however, Drury Rural is home to 4.8 percent Pacific Peoples.

Table 9 Ethnic make-up of Drury

	Pākehā	Māori	Pacific peoples	Asian	MELAA
Drury	73.9	23.3	9.8	11.3	0.3
Drury Rural	79.5	13	4.8	14.2	1.1

Source: Statistics New Zealand, Census 2018 - 2023 Census data at the SA-2 level is not yet available

Figure 7 Ethnic make-up of Drury and Drury Rural, Census 2018



Source: Statistics New Zealand

2.3.1 Porirua City

Porirua City has many similarities to a future Drury with a population of 60,000. Not only do the areas have similar population sizes, but they are also a short drive to New Zealand's two largest central business districts (CBDs) of Auckland and Wellington. Porirua, much like South Auckland, also has a very high Pacific Peoples population (Table 7). Nation-wide, the New Zealand Pacific Peoples population sits at around eight percent. While in Porirua, Pacific Peoples make up just over a quarter of the City's population. In the Mangere-Otahuhu, Otara-Papatoetoe, and Manurewa LBAs, Pacific Peoples account for 59 percent, 46 percent, and 36 percent of the population respectively (Table 7).

Drury is a 49-minute drive from Auckland's Queen Street (37.2km) and a 27-minute drive to Manukau City Centre (17.6km). The suburb of Drury is currently only an extra 18 minutes' drive to the Hamilton CBD (87.9km) in comparison to Auckland's Queen Street. Porirua on the other hand, is much closer to Wellington's CBD (18 minutes or 19.5km) than Drury is to Auckland's CBD.

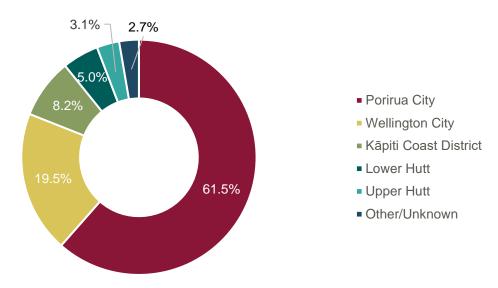


Figure 8 Proportion of Porirua City workers by place of residence (%)

Source: 2013 Census - Journey to Work

According to Porirua City Council, there are around 20,000 people working in Porirua City. Over half of those who work in Porirua live in Porirua. The other half commute from other parts of the Wellington region, alongside a small number who commute from neighbouring regions such as Manawatū-Whanganui. These estimates, alongside those provided by NZ Steel (in the next paragraph), help to build a picture of what proportion of Southern Auckland's future workforce will likely reside in Southern Auckland, or commute from the wider Auckland region.



2.3.1 NZ Steel in Glenbrook, Franklin LBA

Workforce commute data at Glenbrook's NZ Steel can add local insights into where the future workforce needs of Drury and Southern Auckland will come from. According to NZ Steel, around half of their workforce come from the Franklin LBA, while a further quarter of their workforce come from the Auckland region north of Franklin (including Papakura). The remaining quarter come from South of the Franklin LBA in the northern Waikato region, including Pōkeno.

Combining the information we have from Porirua City and NZ Steel, we can reasonably anticipate that around half of the workforce needed to fill the estimated 28,000-31,100 construction jobs required by developers. Around half of the workforce for the 33,550-45,935 direct jobs estimated by developers over the next 30 years will reside in Southern Auckland. While the other half of the workforce will likely commute from the wider Auckland region, with a small number commuting from towns in the northern Waikato.

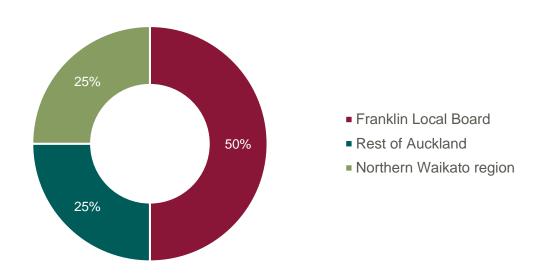


Figure 9 Proportion of NZ Steel workers by place of residence (%)

Source: NZ Steel

2.3.2 Botany electorate

The <u>Botany electorate</u>, sits in the <u>Howick Local Board Area and has</u> a population of 62,590 people. The Botany electorate is a relevant and interesting area to look at in comparison to Drury for a number of reasons. Similar to Drury, Botany is sprinkled with new developments that popped up in the early 2000s. Over the last 27 years, the population in the area has doubled from 30,780 to 62,590. The major town centre opened as recently as 2001, and its secondary school Botany Downs Secondary College opened as recently as 2004.

Highbrook Business Park and East Tāmaki industrial hub

Additionally, Botany electorate (also part of Counties Manuakau) also includes the Highbrook Business Park in East Tāmaki which is home to the current Fisher & Paykel Healthcare campus.



Stephen Hughes, Chief Executive of Drury South Crossing, said in 2021 that there are many lessons to be learned from similar past developments in the Auckland region such as Wiri, Albany, and East Tāmaki: "These areas were established circa 30 years ago and still have issues associated with infrastructure, and ultimately this <u>throttles growth</u>".

As a guide and comparison, we can look to the nearby Highbrook Business Park in East Tāmaki. East Tāmaki has a population of 309 people, as it is a business park and not a residential area. The Highbrook Business Park covers 107 hectares. It provides jobs for around 6,000 people across 140 commercial, industrial, food and beverage, and service businesses. In comparison, the newly planned/underway business park in Dury South Crossing is estimating to provide between 5,000 and 6,900 jobs.

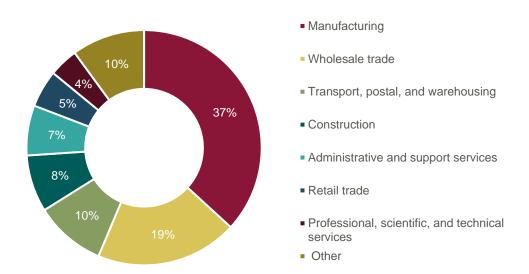


Figure 10 Proportion of East Tāmaki jobs by industry (%)

Source: Statistics New Zealand

The Highbrook Business Park sits inside East Tāmaki. East Tāmaki is a large industrial hub with around 2,000 businesses providing 31,400 jobs with planned growth to reach 45,000 jobs. According to East Auckland Tourism, East Tāmaki contributes around \$3 billion to the New Zealand economy each year. Figure 10 shows the volume and distribution of jobs by sector in East Tāmaki. It shows that the largest proportion (37 percent) of employees in East Tāmaki work in manufacturing, followed by wholesale trade (19 percent), transport, postal, and warehousing (10 percent), and construction (8 percent).

2.3.3 Sylvia Park – Metropolitan Centre by Kiwi Property

Kiwi Property, the developer behind the new planned metropolitan centre in Drury, is also the developer behind New Zealand's largest shopping mall, Sylvia Park. Sylvia Park is in the Auckland suburb of Mount Wellington and was opened in 2006. It has a retail floor area of 106,427m², over

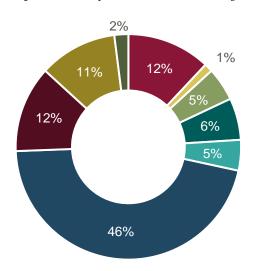


250 stores and services, and employs around 2,500 retail trade workers¹¹. In comparison, the new proposed Metropolitan Centre in Drury will have approximately 119,000 m² of retail space and 5.8 hectares of office floor space.

For estimation purposes, it is reasonable to assume that the retail and office-based jobs that will be created by a similar style-and-size development in Drury will be similar in makeup and scale.

According to Statistics New Zealand, in 2023, 86 percent of those 2,500 retail trade workers were employed in other store-based retailing¹², and 13.3 percent were employed in food retailing (Figure 11).

Figure 11 Proportion of Sylvia Park retail trade jobs by industry (%)



- Supermarket and grocery stores
- Specialised food retailing
- Furniture, floor coverings, houseware, and textile goods retailing
- Electrical and electronic goods retailing
- Recreational goods retailing
- Clothing, footwear, and personal accessories retailing
- Department stores
- Pharmaceutical and other store-based retailing
- Other

Source: Statistics New Zealand

The food retailing jobs at Sylvia Park are mostly supermarket and grocery store positions. Almost half of the other store-based retailing jobs are in clothing, footwear, and personal accessories retailing (1150 jobs), 12 percent are in department stores, 11 percent are in pharmaceutical and other store-based retailing, and six percent are in electrical and electronic goods retailing.

¹² As defined by ANZSICO6, G42 'other store-based retailing' is made up of G421 furniture, floor coverings, houseware and textile goods retailing; G422 electrical and electronic goods retailing; G423 hardware, building and garden supplies retailing; G424 recreational goods retailing; G425 clothing, footwear and personal accessories retailing; G426 department stores; and G427 pharmaceutical and other store-based retailing.



¹¹ Employee counts sourced from Statistics New Zealand's geographic units by industry and statistical area 2000-2023

Financial and insurance services
Professional, scientific, and technical services
Information, media, and telecommunications
Administrative and support services

Figure 12 Proportion of Sylvia Park office-based jobs by industry (%)

Source: Statistics New Zealand

<u>Sylvia Park</u> also supports around 1,747 office-based jobs comprising financial and insurance services (1,600 employee count), professional, scientific, and technical services (70), information media and telecommunications¹³ (65), and administrative and support services (12 travel agent jobs). Two thirds of the 1,600 financial and insurance services jobs are in depository financial intermediation, while the other third is in health and general insurance (Figure 12).

¹³ All 65 are employed in motion picture and sound recording activities.



Planning for growth in Southern Auckland

3 Planned developments in Southern Auckland

The scope of this report includes nine developments either planned or underway in Southern Auckland. The scale and timeframe of each development varies significantly. While the Paerata Rise housing development has an estimated completion date of around 2040, others such as Fisher & Paykel Healthcare and NZ Steel are looking 40-60 years into the future. As a result, these developments will have construction and infrastructure needs spanning the next 30-60 years.

While out of scope for this report, it's important to be aware that developments which plan to grow a population from 5,140 people to 60,000 will have significant physical infrastructure needs such as roads, buses, railways, drinking water, wastewater, and stormwater infrastructure services and more. The jobs required for this infrastructure work would include heavy and civil engineering construction, land development and site preparation services, project management, master planning, and more.

3.1 Fisher & Paykel Healthcare in Karaka

Address: Karaka Road, Karaka

Overview

Fisher & Paykel Healthcare is planning to build a second New Zealand campus in Karaka to complement its existing campus at Highbrook Business Park in East Tāmaki, Auckland. The development began in March 2023, and is planning to have the first site opened by the early 2030s. The development is planned to be fully completed by January 2075 and will be completed in stages.

Figure 13 An artist's rendering of the future campus



Source: Fisher & Paykel Healthcare



Workforce needs

Over the next 15 years, Fisher & Paykel Healthcare is anticipating employing around 2,500-5,000 full-time-equivalent (FTE) new staff. This number is expected to grow to around 15,000 new directly employed FTEs by 2063. Around 98 percent of Fisher & Paykel Healthcare's current staff are permanent employees, while a small two percent are temporary.

Fisher & Paykel Healthcare's East Tāmaki campus tends to add a new building housing 1,200-2,000 people every 5-7 years. The timeline of their workforce needs at the new campus are as follows:

- 300-600 permanent FTE staff over the next 5-10 years
- 600-5,000 FTEs in 10-15 years' time
- 3,100-10,800 FTEs in 30 years' time
- Reaching 10,000-18,000 FTEs by the estimated completion date in 2075.
- During the construction and planning stages, 710-810 FTE temporary/contract nonresidential building construction workers, heavy and civil engineering construction workers, and consultants for master planning.

According to Fisher & Paykel Healthcare, if the new jobs at the new campus mimic the workforce of the existing campus, around two thirds of the new jobs will be in manufacturing and operations, while just over a quarter will be in research and development. Like its East Tamaki campus, the Karaka campus will house a mix of manufacturing, research and development, and office employees.

Alongside direct employment from the site, we estimate around 5,480 indirect jobs and 4,000 induced jobs will be generated as a result of the successful completion of this development (Table 11). According to Fisher & Paykel Healthcare, "suppliers tend to gravitate around us because they try and shorten up their lead times and things like that, so we expect that same phenomena to happen down in Karaka".

3.2 Auranga housing development in Drury

Address: 121 Bremner Road in Drury West¹⁴.

Overview

<u>Auranga</u> is an 83 hectare residential housing development, which also includes an 84.6 hectare <u>Special Housing Area</u>. Auranga is currently working towards providing 2,650 dwellings. In the longrun, Auranga plans to build "<u>a town centre</u>, public transport including trains and buses, a community civic centre, retirement village and schools as well as commercial and retail precincts".

 $^{^{14}}$ 2023 SA-2 of Drury West



Planned developments in Southern Auckland

Residential houses

The development is planning to build around 2,600-2,700 houses for a population of around 7,000 people. Alongside this there are also plans to build an additional 300 homes for around 400-750 people in Glenbrook. Currently, around 1,500 people have already moved into their new homes.

Workforce needs

In order to build the houses, Auranga anticipates requiring around 500 short term civil construction workers, and around 8,500 residential building construction workers. Once the development is completed, estimates put the number of jobs created at around 1,000. Part of the development includes plans to build a primary school, a secondary school, and a pre-school. The primary school, Ngākōroa School for years 1-8 students, opened in 2022. According to Education Counts, the median headcount per primary school is around 48 teachers, and for a secondary school around 98 teachers. The development is also planning to build a retirement village, by Karaka Pines Villages, and this will require healthcare workers. According to Ryman chief executive for New Zealand Cheyne Chalmers each retirement village usually requires around 150 employees¹⁵.



Figure 14 An artist's rendering of the future Auranga development

Source: Auranga master plan

¹⁵https://www.stuff.co.nz/business/130361849/one-business-185-job-ads-why-ryman-needs-so-many-staff



Planned developments in Southern Auckland



Figure 15 An artist's impression of Auranga's planned town centre, Sharewater Ngākōroa

Source: Sharewater Ngākōroa

3.3 Ardmore Airport industrial and commercial expansion near Clevedon

Address: 11 Waharau Lane, Ramarama 2579

Overview

The existing Ardmore Airport is home to around 105 airport tenants that together employ around 650 workers. The <u>airport</u> was originally built by the American Airforce to have a base in New Zealand. Today, the airport is used for a mix of corporate, agricultural, recreation, and flight training purposes. The airport hosts six flight schools. Most of the current businesses at Ardmore are global businesses doing around 95 percent global trade.

According to Ardmore Airport Group's Chief Executive, <u>Dave Marcellus</u>, the current Ardmore tenants include "aircraft assembly, sales, engineering and maintenance, avionics, banner towing, agricultural services and more".

Workforce needs

Ardmore Airport has begun plans to develop a large industrial hub. Stage one has plans for over 15 industrial, commercial, and retail businesses. This first stage will be developed over the next 15 years and is estimated to create around 2.500 jobs.



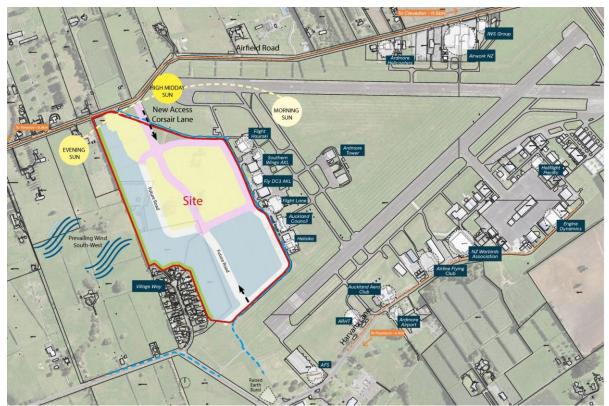


Figure 16 The Master Plan for the Ardmore development

Source: ardmoreairport.co.nz

The first stage of civil works is nearly complete. Construction of roads, drainage, power supply, streetlights, and landscaping are almost finished, while the final stage is 5-10 years away. Once complete, the developers plan to sell freehold titles.

Stage two will develop land for another 35, industrial, commercial, and retail businesses. Developers anticipate providing up to 7500m² of retail space. The types of businesses expected to pop up in the development are very conventional industrial, commercial needs, including manufacturing and distribution centers, as well as engineering, and specialised engineering. Estimates suggest that stage two could provide an additional 4,000-5000 jobs.



3.4 Drury South Crossing industrial, commercial, and residential development in Ramarama

Address: 11 Waharau Lane, Ramarama 2579

Overview

Drury South Crossing is the largest of the developments in the area. Residential development began in 2019 and is anticipated to be completed in 2027. <u>Drury South Crossing</u> anticipates that a large proportion of staff employed in the new businesses are expected to live locally, leading to short commutes.

Figure 17 The Master Plan for the Drury South Crossing development



Source: Drury South Crossing

Residential houses

The residential area of Drury South Crossing, Hunua Views Residential, will include around 800 residential homes (Special Housing Area), which will provide affordable housing for 2,000 Kiwis. There will also be around 90 hectares of open space. The development also includes a new early childhood education centre. According to the Auckland Council unitary plan, the residential precinct will include mixed housing suburban, mixed housing urban, terraced housing, and apartment buildings.



Workforce needs

The construction phase of the development, which began in 2020, is estimated to require around 8,700-11,500 jobs. The completion of Drury South Crossing is estimated to create between 5,000 and 6,900 direct jobs, and facilitate 10,000-12,200 indirect jobs in the region.

Drury South Crossing is forecast to make an annual contribution of "\$780m to regional GDP and facilitate flow-on annual GDP benefits of \$2.3 billion. The construction of the site itself, as a one-off impact, will result in \$620-\$820m in regional GDP and provide for the equivalent of 8,700-11,500 jobs during its development".

3.5 Kiwi Property metropolitan centre, Fulton Hogan, and Oyster Capital residential developments in Drury East

Address: Flanagan Road/ western side of Fitzgerald Road, Drury

Overview

Under the Auckland Unitary Plan, metropolitan centre's are second only to city centre's in overall scale and intensity, "they act as focal points for community interaction, commercial growth, and development. Metropolitan centres also contain hubs serving high frequency transport". Other metropolitan centres in Auckland include Sylvia Park, Westfield Manukau, and Albany. Kiwi Property is also the developer behind Sylvia Park, which is currently New Zealand's largest shopping mall.

As part of the Drury East development plan, "three separate Private Plan Changes have been lodged simultaneously to ensure there is a cohesive outcome for the Drury East area". These three plans are depicted in Figure 18 and include:

- Waihoehoe, Oyster Capital: 49 hectares of high-quality, high-density housing
- **Drury East, Fulton Hogan:** 184 hectares of high-quality, high-density housing and a small two hectare mixed use centre¹⁶
- **Drury Centre, Kiwi Property:** 95 hectares for a Metropolitan Centre integrated with a train station, housing, and employment.

According to the Auckland unitary plan, the Mixed Use Zone "is typically located around centres and along corridors served by public transport. It acts as a transition area, in terms of scale and activity, between residential areas and the Business – City Centre Zone, Business – Metropolitan Centre Zone and Business – Town Centre Zone. It also applies to areas where there is a need for a compatible mix of residential and employment activities. The zone provides for residential activity as well as predominantly smaller scale commercial activity that does not cumulatively affect the function, role and amenity of centres. The zone does not specifically require a mix of uses on individual sites or within areas".

¹⁶ Under the Auckland Council Unitary Plan, the mixed-use zone allows for residential activity alongside smaller scale commercial activities.



Planned developments in Southern Auckland

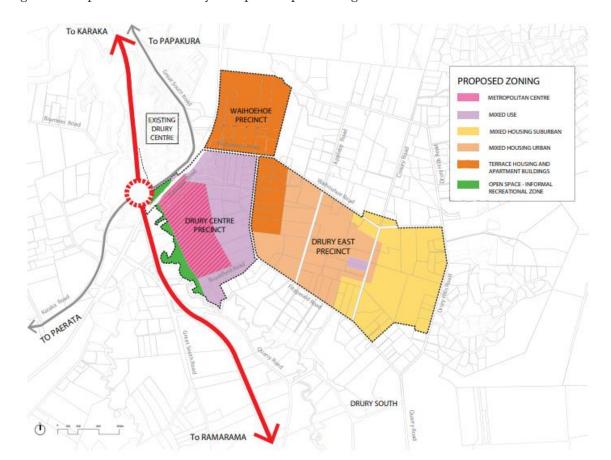


Figure 18 Map of the three Drury East private plan changes

Source: <u>Auckland Council Unitary Plan documents</u>

Residential houses

Alongside the new retail and office spaces (Kiwi Property), the development also includes plans for Oyster Capital and Fulton Hogan to build approximately 7,000 new homes for around 19,000 people by 2032. There are also plans in place for significant <u>infrastructure</u> such as a rail station and a bus interchange. Rail stations in Drury Central and Drury West have been allocated \$247 million in funding. There are plans for a bus interchange to integrate with the Drury Central train station.

Workforce needs

The new proposed metropolitan centre, by Kiwi Property, in Drury will have approximately 119,000m² of retail space and 5.8 hectares of office floor space. For comparison, Sylvia Park has a retail floor area of 106,42 m², over 250 stores and services, and employs around 2,500 retail trade workers¹7. Kiwi Property estimates that this new development will support around 5,000-6,000 new jobs. For comparison, as of June 2023, Sylvia Park supported 6,100 jobs. Therefore, it's reasonable to assume that these two developments will be similar in size and scope. Currently, the Drury Metropolitan

¹⁷ Employee counts sourced from Statistics New Zealand's geographic units by industry and statistical area 2000-2023



Centre plan includes a Warehouse, Briscoes, Rebel Sport, New World, and a large wholesale supermarket.

The Drury East development also includes provisions for a new regional hospital, a library, two new primary schools, and one new secondary school. Across the Auckland region, the median number of FTE teachers sits at 84 per secondary school and 22 per primary school. Therefore, estimates place workforce needs at around 128 FTE teachers.

3.6 Park Green residential development in Papakura/Karaka

Address: 320 Park Estate Road, Papakura

Overview

Park Green is a housing development by Fletcher Living currently underway on the Hingaia Peninsula in Papakura. The development began in 2020 and covers 97 hectares and has a range of 2–5-bedroom houses being built over three stages.

Residential houses

Fletcher Living is planning to build around 1,250 new homes at Park Green in Karaka/ (Papakura LBA) for around 3,700 people (timeline currently undefined). Stage one lots were listed for sale in January 2024 and have almost all sold, while stage two houses are currently selling and stage three forms their future stage plans. Around 120 have been sold to date.

Workforce needs

To build the houses, estimates suggest a need for around 4,000 residential building construction workers. The development includes the new (opened 2022) primary school of Mangapikopiko School. As mentioned previously, Education Counts data states that the median headcount per primary school is around 48 teachers, and for a secondary school around 98 teachers. The development also has plans for a retirement community called, <u>Vivid Living</u>, which usually requires around 150 employees¹⁸. In late 2024, the development has plans to open a neighborhood centre, which will facilitate a small number of retail jobs. The neighbourhood centre will include a BestStart ECE centre, which is on track to open in the first quarter of 2025 and will require around 6-7 registered teachers per centre.

¹⁸https://www.stuff.co.nz/business/130361849/one-business-185-job-ads-why-ryman-needs-so-many-staff



Planned developments in Southern Auckland

3.7 Expansion of NZ Steel works in Glenbrook,

Address: 131 Mission Bush Road, Glenbrook 2681

Overview

NZ Steel are proposing two new developments at their Glenbrook site. The first is the planned installation of an <u>electric arc furnace (EAF) in the next three years.</u> The EAF is not anticipated to generate any new jobs, however, it will safeguard existing jobs as the steel plant transitions away from a heavy carbon footprint to a lower carbon production. NZ Steel currently employs around 1500 FTEs, plus 800-900 contractors.

The second phase of their development plans includes the creation of a new industry and business park focused on creating a world-class, clean, and green industrial ecosystem. Master planning for the site is starting now and will encompass a 30-year timeline until completion.

Workforce needs

In the short run, the development anticipates requiring around 1,000 new infrastructure jobs. This includes jobs in energy storage devices and renewables. Over the next 30 years, the new development is anticipated the generate around 10,000 new jobs in manufacturing, (supply chain partners), logistics and warehousing, transport and distribution, green energy (e.g., hydrogen, renewables, energy storage devices), green ammonia production, an agri-tech hub (medium term), aquaculture, greenhouses, and hydroponics.

Additionally, NZ Steel estimates generating a small number of around 100-150 new jobs in preschool education, health care services, and retail trade.

NZ Steel's plans for the hydrogen hub are more short-term, with plans beginning in the next 3-4 years. Resulting from the nature of the development (carbon neutral energy), NZ Steel anticipates requiring around 50-100 workers with specialist skill sets. For example, hydrogen related engineering in roles such as hydrogen hub engineers and project managers. Because these skills are so specialised, as well as the technology being very new, NZ Steel expects to source these specialist roles from overseas.

Additionally, because the development is planning to take 30-60 years until completion, NZ Steel anticipates requiring around 500 construction jobs consistently until 2054.



3.8 Paerata Rise residential development between Karaka and Pukekohe

Address: 801 Paerata Road, Paerata

Overview

The developers, Grafton Downs, are developing a full town consisting of mainly residential areas, but with some retail pockets. Grafton Downs Limited is a Charitable Company owned and managed by the Methodist Church of New Zealand. The development includes 950m2 of retail space. It is zoned under the Auckland Unitary Plan as 'Local Centre Zoning' - predominately convenience retail and services, office, and commercial service activities, food and beverage, fitness gyms, and pharmacies.

Pareata rise will also include small groupings of 2-3 convenience shops scattered around the residential areas of Paerata North. These pockets are zoned under the Auckland Unitary Plan as 'Neighbourhood Centre Zoning', which includes local takeaway shops, superettes, and convenience services like hairdressers.

Residential houses

Paerata Rise is planning to build 4,000-5,000 new homes for around 15,000-20,000 people. Construction began in October 2016 and is planned to be completed around 2040.

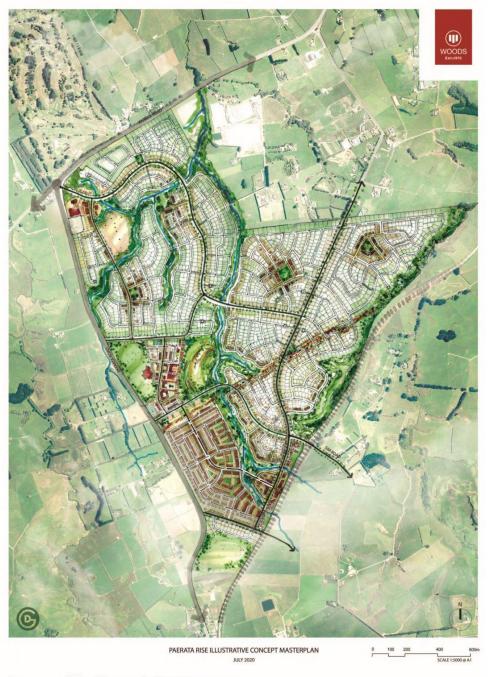
Workforce needs

The developers of Paerata Rise estimate it to contribute 1,800 jobs once the development is successfully completed. The majority of the jobs required in the development, once it is completed, will be in retail, food, and accommodation. The development itself will require ongoing construction workers until 2040. The already completed stages of the development have existing workforce needs for the following services:

- ECE Centre, already completed
- Café, opened in 2018
- New primary school, completed in 2021
- New Wesley College will create construction jobs (the old Wesley College already exists).
- Supermarket will create retail trade jobs.



Figure 19 Paerata Rise illustrative concept masterplan



Source: paeratarise.co.nz/master-plan/

3.9 Blue Float Energy wind farm off the Waikato Coast

Address: offshore - Waikato Coast

Overview

Blue Float Energy is in the early planning stages of developing a wind farm off the Waikato coast near Franklin and the South Taranaki coast. The construction period is estimated to begin by 2031 and will last approximately three years, with the actual work in the offshore locations mostly happening during the summer months (Nov-April). For both projects in Waikato and South Taranaki, the most likely construction base will be Port Taranaki in New Plymouth, which means that even for turbines off the coast of Waikato, the access point from land will be New Plymouth. It is anticipated that fabrication of components will be undertaken both overseas and domestically.

Workforce needs

Currently, Blue Float Energy estimate a potential to create between 0-200 long-term FTEs in the Southern Auckland region beginning 2034. These job estimates are indicative only and assume the Waikato project proceeds with a grid connection at Glenbrook and an operations and maintenance base at Onehunga. Onehunga is one of three primary locations that Blue Float Energy are assessing for this purpose. If the grid connection at Glenbrook does not go ahead or the operations and maintenance base is at another location outside of Auckland, then the direct jobs for Auckland will be at the lower end of the scale¹⁹.

The three planned phases to the development, and their corresponding *potential* job requirements for Southern Auckland are as follows:

- Phase one, feasibility and planning- 5 years beginning 2026: 40 direct FTEs created during this phase, with key roles in project management, community engagement, environment and planning, and design engineering.
- Phase two, construction, installation, and fabrication 3 years beginning in 2031: 500 direct FTEs created for engineers, wind turbine technicians, marshalling crew (stevedores, heavy lift riggers, crane operators, and rope access specialist), installation technicians, remote operated vehicle technicians, maritime QHSE specialists, marine crew, welders, heavy steel fabricators, supervisors, foremen, machine operators, rope access technicians, riggers, and mechanics.
- Phase three, operations and maintenance 30-35 years beginning in 2034: up to 200 direct FTEs created for wind turbine technicians, seafarers, operations and maintenance control room specialists, electrical/mechanical technicians, logistics and asset management staff, and marine crew.

¹⁹ The jobs will instead end up in South Taranaki or Waikato



3.8.1 Wider developments in the Franklin Local Board Area of Southern Auckland

While this report focuses primarily on nine developments, this is not intended as an all-encompassing analysis on every development in the region. Additionally, this report should be seen as a snapshot in time. The LBA of Franklin covers 1,199.75 square kilometres, spanning from the North Island's west coast to the east coast. The Franklin LBA encompasses the <u>Tasman Sea</u> in the west, the <u>Manukau Harbour</u> at its centre, and the <u>Hauraki Gulf</u> in the east. Other key developments and investors in the area include the Nakhle Group, Zealandia Horticulture, Counties Energy, and Fulton Hogan. Additionally, there are also housing and industrial developments underway in Beachlands, which is part of the Franklin LBA but is roughly a 40-minute car ride away from Drury and Karaka.

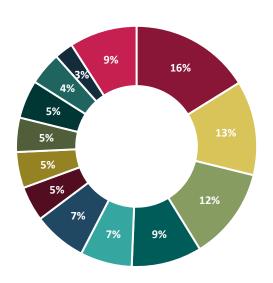


4 Projected job growth

Currently, Southern Auckland has a population of 161,100, and provides 46,100 total industry jobs (employee count) across the Papakura and Franklin LBAs. Estimates from developers put the total new direct jobs over the next 30 years between 35,300 to 50,100. Alongside this, across the developments, developers anticipate a need for between 28,000-31,100 construction jobs.

Based on the most recent 2023 statistics, manufacturing (16 percent), retail trade (12 percent), and construction (13 percent) are the largest industry employers in Franklin and Papakura.

Figure 20 Current industries in Southern Auckland, proportion of total employee count (%)



- Manufacturing
- Construction
- Retail trade
- Education and training
- Health care and social assistance
- Accommodation and food services
- Transport, postal, and warehousing
- Professional, scientific, and technical services
- Administrative and support services
- Wholesale trade
- Agriculture, forestry, and fishing
- Public administration and safety
- Other

Source: Statistics New Zealand

Table 10 presents the number of new direct jobs that each developer anticipates will be generated as a result of the successful completion of their development. For each development, both a low estimate and a high estimate has been provided. The total number of new direct jobs are the developers estimates, sourced from either publicly available documents or via stakeholder interviews. Also included in Table 10 is a breakdown of the industries that these new direct jobs are expected to be in. The industry breakdowns come from a variety of sources including publicly available documents released by the developers, stakeholder interviews, and Statistics New Zealand's business demography statistics.



Table 10 Estimated projected **new direct** jobs by industry, per development (over the next 30 years)

	In director		New added Jobs	
	Industry	Low	High	
	Research and development engineers		4,500	
Fisher & Paykel Healthcare (by 2054)	Manufacturing and operations	1,250	4,500	
	Sales, marketing, and distribution	200	600	
	Management and administration	500	1,200	
	Infrastructure: energy storage devices, renewables		1,000	
NZ Steel	Manufacturing logistics	10,000	10,000	
(by 2053+)	Food and beverage	93	143	
	Specialists (e.g., hydrogen related engineering)	100	150	
	Retail trade	2,500	2,500	
	Financial and insurance services	1,600	1,600	
	Manufacturing	891	891	
Drury East Centre: Kiwi Property,	Accommodation and food services	540	540	
Oyster Capital, and Fulton Hogan	Wholesale trade	180	180	
(by 2042)	Professional, scientific, and technical services	70	70	
	Information media and telecommunications	65	65	
	Administrative and support services	12	12	
	Hospitals (provision for new regional hospital)	0	340	
	Teachers	142	142	
	Manufacturing	3,960	5,256	
	Wholesale trade	2,200	2,920	
Ardmore Airport and Drury South	Transport, postal and warehousing	1,100	1,460	
Crossing	Construction services	880	1,168	
(Industry and business parks) (by 2038)	Retail trade	550	730	
(by 2000)	Administrative and support services	770	1,022	
	Professional, scientific, and technical services	440	584	
	Other	1,100	1,460	
	Managerial and professional roles	0	40	
Blue Float Energy	Technicians and trade (operations and maintenance)	0	200	
	Teachers (excluding Kiwi Property)	126	126	
Across developments (including Auranga, Paerata Rise, & Green	ECE teachers	24	48	
Park)	Retail trade	1,957	2,488	
(by 2040)	Residential care services	48	48	
	Medical and other health care services	102	252	
Total <u>new</u> direct jobs		33,550	45,93	

Source: BERL analysis, developers, and Statistics New Zealand.



Table 11 Estimated **new indirect and induced** jobs resulting from the developments over the next 30 years

Development	Estimated completion year	Direct (average)	Indirect	Induced	Total
Fisher & Paykel Healthcare	2075	6,950	3,663	2,739	13,402
NZ Steel	2054	11,243	17,761	8,869	37,873
Drury East (Kiwi Property, Oyster, Fulton Hogan)	2042	6,350	5,054	2,961	14,364
Ardmore Airport and Drury South industry and business parks	2035-2040	12,800	8,816	5,201	26,817
Blue Float Energy	2033	120	211	112	443
Across the housing developments	2030+	2,619	791	623	4,032
Total (middle-range)		40,115	36,286	20,471	96,871

Note: some developments span out over the next 50 plus years, however this table estimates the number of jobs resulting from the completed parts of the development as at March 2054.

Source: BERL analysis

Table 11 presents estimates for the number of indirect and induced new jobs that will be created once the developments have either been completed, or at their given stage of completion in 30 years' time. Estimates have been created using the average number of direct job estimates (i.e. summing the low estimate and the high estimate and dividing by two). Estimates were generated by adopting a multiplier analysis. Multipliers are derived from inter-industry input-output tables for Aotearoa New Zealand²⁰.

Multiplier analysis is a conventional and well understood method for quantifying the economic impacts of the construction, maintenance, and operation of proposed investments. It is a partial equilibrium method which used multipliers derived from inter-industry input-output tables for Auckland to track how money ripples through the city's economy.

The contribution of construction and operation to Auckland's economy is not limited to the value it creates directly. An increase in expenditure (output) has repercussions throughout the whole economy, causing effects beyond the initial increase in production.

This is known as the multiplier effect which can be broken down into three impacts:

• **Direct** – referring to the direct economic activity generated by the industry, such as money spent on capital costs and operations.

²⁰ Input-output tables have been derived from the national input-output tables by Butcher Partners, Canterbury, a recognised source for regional input-output tables and multipliers.



- **Indirect** referring to economic activity generated by industries associated downstream and upstream to the industry, for example through businesses purchasing additional goods and services to cater for an increasing workforce.
- **Induced** referring to economic activity generated by industries not associated with the industry in the value chain, but still affected by the additional economic activity. This includes, for example, the spending of income earned by facilities managers and facilities administrators on consumer goods and services.

Table 12 presents a breakdown of the additional workforce needs (above that already planned by the nine developers) that will be required in the wider Drury area because of the planned population growth. Further discussion on new jobs in education and healthcare can be found in sections 6.1 and 6.2.

Table 12 Estimated, additional health care and education jobs required for a Drury population of 60,000

In duction ,	Estimated number of new jobs		
Industry	Low	High	
Preschool education	303	506	
School education	1,109	1,109	
Health care and social assistance	960	2,500	

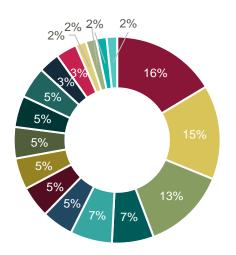
Source: BERL analysis



5 Future jobs outlook

This section presents the data collected from 61 Auckland-based businesses²¹ regarding their firms' skills and jobs outlook. The 2023 Ministry of Business Innovation and Employment's (MBIEs) Future of Jobs Survey examines employers' views on future skill requirements and qualifications, and the availability of talent. Employers also provide their views on the current qualities of their workforce. and what skills they believe to be the most important to perform well in key roles.

Figure 21 The industries of 61 Auckland-based businesses (%)



- Manufacturing
- Professional, scientific, and technical services
- Construction
- Transport, postal, and warehousing
- Information, media, and telecommunications
- Wholesale trade
- Financial and insurance services
- Administrative and support services
- Education and training

n=61 Auckland businesses

Source: MBIE The Future of Jobs Survey, 2023

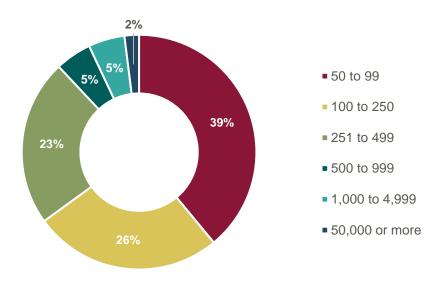
Figure 21 shows that 44 percent of these Auckland-based businesses/organisations are in manufacturing, professional, scientific, and technical services (which includes engineering), and construction. A further 10 percent are in education and training (three organisations) and health (three organisations).

²¹ Businesses based in Auckland that employ over 50 employees and where at least 50 percent of their workforce is based in Auckland.



Future jobs outlook

Figure 22 The size of the 61 Auckland Businesses' New Zealand based workforce (%)



n=61 Auckland businesses

Source: MBIE The Future of Jobs Survey, 2023

According to the Auckland businesses surveyed, the key roles with a growing employment outlook at their organisation over the next five years were 'information and organisation professionals' and 'business and systems analysts and programmers', followed by 'human resource and training professionals', and 'construction, distribution, and production managers' (Table 13).

Table 13 Most common roles in Auckland with growing employment outlook over the next five years (%)

Role in organisation	% of businesses
Information and organisation professionals	18
Business and systems analysts, and programmers	18
Human resource and training professionals	15
No roles	13
Construction, distribution, and production managers	13
Clerical and administrative workers	8
Health diagnostic and promotion professionals	8
Sales, marketing, and public relations professionals	8

n=61 Auckland businesses

Source: MBIE The Future of Jobs Survey, 2023



Table 14 Most common roles in Auckland with <u>stable</u> employment outlook over the next five years (%)

Role in organisation	% of businesses
Clerical and administrative workers	23
Construction, distribution, and production managers	11
Accountants, auditors, and company secretaries	10
Accounting clerks and bookkeepers	8
Sales assistants and salespersons	10
Sales, marketing, and public relations professionals	10
Advertising, public relations and sales managers	7
Business administration managers	7
Information and organisation professionals	7

n=61 Auckland businesses.

Source: MBIE The Future of Jobs Survey, 2023

According to the Auckland businesses surveyed, the top three key roles with a stable employment outlook at their organisation over the next five years were clerical and administrative workers, construction, distribution and production managers, and accountants, auditors, and company secretaries (Table 14). Over one-third of the businesses said that they didn't have any roles with a declining employment outlook (roles likely to be made redundant, obsolete, or surplus to requirements).

Almost half of all businesses surveyed (47 percent) said that it was highly likely that supply shortages and/or rising cost of inputs will drive transformation in their organisation over the next five years. 39 percent said it was highly likely that the rising cost of living for consumers will drive transformation in their organisation. 38 percent said it was highly likely that the increased adoption of new and frontier technologies will drive transformation in their organisation, and 23 percent said it was highly likely that investments to facilitate the green transition of their business will drive transformation in their organisation over the next five years.

Table 15 Top 8 trends most likely to drive transformation in Auckland organisations (%)

	Highly likely	Likely	Sum
Supply shortages and/or rising cost of inputs for your business	47	36	83
Increased adoption of new and frontier technologies	38	44	82
Rising cost of living for consumers	39	38	77
Consumers becoming more vocal on environmental issues	25	51	75
Investments to facilitate the green transition of your business	23	49	72
Slower global economic growth	21	51	72
Broadening digital access	34	36	70
Broader application of Environmental, Social and Governance (ESG) standards	31	39	70

n=61 Auckland businesses

Source: MBIE The Future of Jobs Survey, 2023



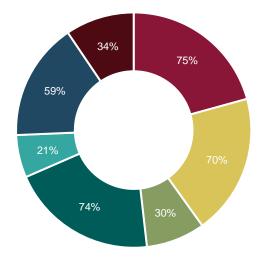
Additionally, 10 percent of Auckland businesses surveyed stated that labour availability, shortages, and the availability of skilled labour will drive transformation in their organisation over the next five years.

Table 16 Top 10 core skills required by Auckland businesses to perform well in key roles with a stable outlook (%)

85
79
70
69
64
52
48
43
39
39

=61 Auckland businesses Source: MBIE The Future of Jobs Survey, 2023

Figure 23 Actions that Auckland businesses are very likely to take in the next five years to address a shifting skill demand (%)



- Retrain existing employees
- Hire new permanent staff with skills relevant to new technologies
- Hire new temporary staff with skills relevant to new technologies
- Expect existing employees to pick up skills on the job
- Strategic redundancies of staff lacking new technology skills
- Look to automate the work
- Outsource some business functions to external contractors

n=61 Auckland businesses - totals add to more than 100% as multiple answers are allowed

Source: MBIE The Future of Jobs Survey, 2023

62 percent of Auckland businesses said they struggle to find people with the skills required to fill their vacancies. 28 percent did not agree that university graduates possess the skills needed by their organisation. 46 percent did not agree that the Auckland population has sufficient digital skills (e.g. computer skills, basic coding, digital reading).



5.1 Population growth will not be enough to fill future jobs in South Auckland

While South Auckland's and Auckland's populations are growing, a simple correlation between population increase and job filling may be misleading. Several factors suggest that population growth alone might not be sufficient to address future labour shortages. The market alone will not provide the necessary physical and social infrastructure required to both adequately sustain this population and incentivise skilled workers to reside and seek employment in the area. Instead, it will rely on both local and central governments coordinated planning and intervention. For example:

- Increasing the population of an area from 5,140 people to 60,000 requires significant physical and social infrastructure. While population growth in South Auckland will contribute to a larger workforce, it is essential to consider demographic, economic, and labour market factors to assess its impact on future job vacancies. A multifaceted approach that includes investments in education, skills development, and economic diversification is likely to be necessary to bridge the gap between population growth and labour market needs.
- Across the eight developments, future needs have been identified for a new hospital, general practitioners/family doctors, retirement villages and care homes, primary and secondary schools, and early childhood learning centers. Each of these facilities will require skilled workers in sectors that are already considered understaffed and under resourced.
- Even with a growing population in Auckland and South Auckland, specific skill gaps might
 persist hindering businesses from finding qualified workers. Other factors to consider are
 childcare availability, education levels, and cultural norms that can all influence labour
 force participation and affect the overall supply of workers.
- With the young Māori and Pacific Peoples population, and the ageing Pākehā population, a significant portion of population growth might come from age groups outside the typical workforce (e.g., children, retirees). Secondly, new residents may not possess the specific skills required for emerging job roles, as discussed in the next section, in sectors like technology, healthcare, construction, and green energy generation.
- While Auckland's diverse population is a strength, there are still disparities in educational attainment, employment rates, and occupational distribution among different ethnic groups. This will need to be addressed.
- Steps should be taken to bridge the gap between supply and demand for skilled workers in key areas such as health care, education, construction, engineering, and science, technology, engineering, and mathematics (STEM). The Council should look at steps they can take to work with the community, particularly Māori and Pacific Peoples, to support them into training and employment in these key skill areas.

Focusing on the growing Māori and Pacific Peoples population is crucial to addressing the skills gap. Auckland and South Auckland's Māori population is experiencing significant growth. Alongside this



Auckland is the largest Pacific Peoples city in the world. This demographic shift presents a valuable resource to fill the upcoming workforce needs in Southern Auckland. Simply relying on population growth will not suffice. We need to ensure the Māori and Pacific Peoples population has the necessary skills and qualifications for these future jobs. Alongside this, measures should be taken to close the supply and demand gaps in the labour market that are driving skilled workers overseas.



6 High and specialist skills needed

The new developments in Southern Auckland are estimated to deliver between 33,550-45,935 new direct jobs. A number of these jobs will be in highly skilled positions in which New Zealand (and Auckland) has a shortage. This section investigates the four key high skilled industries that will be required over the next 10-30 years to meet the growing population demands and business needs. The four key industries we look at are education, health, construction, and engineering.

Additionally, many of the developments, particularly Fisher & Paykel Healthcare, NZ Steel, and Blue Float Energy require not only highly skilled workers, but also a significant number of specialist staff. Estimates, from discussion with stakeholders, suggest that around 10 percent of the new staff required by these three developments will be in specialist roles – notably in low-carbon energy engineering and medical technology engineering, design, research, and development.

The Australian and New Zealand Standard Classification of Occupations (ANZSCO) ranks occupations by skill level. According to Statistics New Zealand: "A skill level is based on the range and complexity of tasks performed in a particular role. Generally, a skill level is measured by the level or amount of required formal education and training, on-the-job training, and previous experience. The greater the range and complexity of the tasks, the higher the skill level of an occupation. Skill level does not relate to the qualifications obtained by an individual, but to the range and complexity of the tasks they do at work".

Table 17 ANZSCO occupation skill level ranking and definitions

Skill level	Occupation and industry
1 – Highly skilled	Managerial and professional roles mainly in these industries: education and training (teachers); professional and technical services; health and social assistance; and agriculture (farmers and farm managers).
2	Managerial roles in the accommodation and retail industries, and support workers in the health and social assistance industry.
3 – Skilled	Technicians and trade workers in the construction, manufacturing, and other services industries.
4	Carers and receptionists in the health industry; road and rail drivers in the transport industry; and clerks, operators, drivers, store people, process workers in the manufacturing industry.
5 – Lower skilled	Sales workers in the retail industry; factory process workers in the manufacturing industry; accommodation, farm, forestry, and garden workers in agriculture; and cleaners and laundry workers in administration.

Source: Statistics New Zealand

According to research conducted by <u>Statistics New Zealand</u> close to 50 percent of Pākehā and Asian people work in skill level 1-2 occupations, while over 50 percent of Māori and Pacific Peoples work in skill level 4-5 occupations.



High skills

6.1 Teachers

A population increase from 5,140 to 60,000 over the next 30 years will require around 1,548 new teachers (Table 12 and Table 19). This figure comprises around 994 estimated new schoolteachers plus an estimated 554 new preschool teachers. This total figure includes the estimated 268 (234 FTE) school teachers required for the two <u>primary schools and one secondary school</u> planned in the Kiwi Property metropolitan area, and the secondary school and primary school planned in Auranga. The total figure also includes the 40 preschool teachers estimated by the new developments.

Auranga, Drury South Crossing, Park Green, and NZ Steel have each indicated the provision of an ECE centre. Alongside this we assume with a residential population of 19,000 being planned in the Drury East Kiwi Property area that another ECE centre would be required. Therefore, we estimate a requirement for around 24-48 registered ECE teachers across these residential developments.

Alongside this requirement, should the population of Drury grow to 60,000 people, this will increase the total number required for registered ECE teachers by an additional 353-554 (Table 12).

Table 18 2023 employee count for the Southern Auckland education industry

	Population	Preschool education	School education	Tertiary education	Adult, community and other
Papakura LBA	75,800	440	1,300	45	130
Franklin LBA	85,300	630	1,550	25	200
Drury	5,140	21	35	0	9
Auckland region	1,657,000	10,200	34,100	16,000	6,900

Source: Statistics New Zealand, business demographic statistics

According to Education Counts, the median number of teachers required per primary school is 24 teachers (equivalent to 22 FTEs) and the median number of teachers required per secondary school is 98 (84 FTEs).

Across New Zealand, there are currently 4,483 ECE centres employing a total of 28,743 teaching staff. This works out to an average headcount of 6.41 registered teachers per centre. The number of registered teachers per centre can range up to 10 per centre.

Table 19 Estimated, new additional teaching jobs required for the planned Drury growth

	Preschool Education (high)	School Education
Additional need 60,000 population Drury	514	726
Auranga, Paerata & Metropolitan centre	40	268
Total new workforce needs	554	994

Source: BERL analysis



6.1.1 Shortage of skilled labour in New Zealand's education workforce

According to the Post Primary Teachers Association (PPTA), secondary teacher shortages are at "crisis point". In January 2024, South Auckland school principal Vaughan Couillault and president of the Secondary Principals Association of New Zealand (SPANZ) told Radio New Zealand, "It is challenging still to attract quality applicants to positions, so I've got a position that I've advertised at the moment for example, and whilst there are applicants for that job, there aren't any that are currently based in New Zealand." East Auckland school principal, Dale Burden, says that the teacher shortage is not new and has been an issue for 20 years. Additionally, teachers are leaving for Australia "[in Australia] the conditions are significantly superior. To start, the cost of living is much less, even in a place like Melbourne, and the salaries are about 20 per cent higher [...] "Apart from the numbers of trainees, which are lower than what needs to be, the only way we fill it is from overseas, if we're lucky, or from another school".

<u>Early Childhood New Zealand</u> estimates that New Zealand needs "2,100 new early childhood teachers a year. That is, 800 to replace those leaving the profession and 1,300 to meet increased demand for places in early childhood services."

Table 20 Number of people in the education professional's occupation, by Auckland region and District Health Board (DHB) areas

	Education Professionals
Auckland region	41,031
Waitemata DHB	16,128
Auckland DHB	13,131
Counties Manukau DHB	12,312

Source: Census 2018

At the 2018 Census, there were a total of 41,031 education professionals in the Auckland Region. Of that total number of education professionals, 82 percent were also employed in the education industry. The remaining 18 percent were working in other industries including social assistance services (seven percent), and public administration (three percent).

Table 21 Number of people in the education professional's occupation, by education industry, for the Auckland region

Industry	Māori	Non-Māori	Skill level
Preschool and school education	2,523	22,770	1
Tertiary education	411	4,704	1
Adult, community, and other education	213	2,940	1
Total	3,147	30,414	

Source: Census 2018



6.2 Nurses and doctors

The Drury East development underway (Kiwi Property, Oyster, and Fulton Hogan) includes the provision for a new regional Hospital Precinct. Based on the projected population growth in Drury, we estimate that a new general-service type hospital will require around 340 health staff (238 nurses and 62 doctors) to fulfil the workforce needs and an additional 900 support staff. Based on the population to workforce ratios calculated from Table 22, the increase in population in Drury would bring with it a demand for an additional 1,300-2,840 workers in the healthcare and social assistance industry.

Based on national trends (Table 22), if Drury went ahead with a new general service public hospital, then around 11 percent of all jobs in Southern Auckland will be in healthcare and social assistance, with around one third of them being hospital based.

Table 22 2023 employee count for the Southern Auckland health care and social assistance industry

	Population	Total Health Care and Social Assistance	Hospitals	Medical Services	Pathology and Diagnostic Imaging Services	Allied Health Services	Other Health Care Services	Residential Care Services	Social Assistance Services
Porirua City	61,600	3,450	1,200	250	15	630	260	550	540
Napier City	65,000	2,500		440	30	610	110	790	540
Nelson City	52,900	4,400	1,850	260	100	730	120	950	390
Papakura LBA	75,800	1,400	85 ²²	160	30	250	110	580	210
Franklin LBA	85,300	1,800	280	160	45	320	30	510	480
Drury	5,140	53		18	-	15	-	15	6
Auckland	1,657,000	87,900	32,600	6,200	1,750	15,700	4,100	14,900	12,600

Source: Statistics New Zealand Statistics New Zealand, business demographic statistics.

Table 23 presents estimates of the total *new additional* roles in healthcare and social assistance that would be needed in Southern Auckland if the population were to reach its anticipated 60,000. These figures have been created by taking into consideration both the developments' indicated intentions *and* the projected population growth for the area.

²² Papakura does not have a general service public hospital, see Table 53, however. Papakura does, however, have a <u>private hospital</u> which sits next to the Papakura Oaks Metlifecare Retirement Village (service type is geriatric, medical, physical, and rest home care).



High and specialist skills needed

Table 23 Estimated, new additional health care and social assistance jobs required for the planned Drury growth

	Low estimate	High estimate
Medical and other healthcare services	750	1,950
Residential care services	550	550
Hospital	0	425
Total healthcare and social assistance	1,300	2,840

Source: BERL analysis

For comparative estimates, Hawkes Bay Hospital in Hastings is one of five public hospitals in the Hawkes Bay, and the only public hospital in Hastings. It services the Hastings population of 88,000 people. It has a capacity of 364 beds and employs around 3,280 staff, 70 percent of whom (2,300) are nurses. Based on the known workforce ratios of Hawkes Bay Hospital, 70 percent of the new hospital jobs in Southern Auckland would likely also be nurses, 21 precent would be doctors, and the remaining nine percent other, including service and retail staff such as cleaners and food and beverage staff.

BERL estimates that should a new public hospital go ahead in Drury, the number of healthcare jobs required will be in line with those of Porirua's Kenepuru Hospital and Waitakere Hospital in West Auckland. We make this assumption based on two key factors. The first being that the areas have similar sized populations (60,000) and will therefore service similar sized populations. Secondly, both areas are one part of a wider region (Wellington region and Auckland region)

- Wellington region has two other general-service-type public hospitals:
 - o Hutt Valley Hospital, with a capacity of 322 beds employs 1,640 healthcare staff
 - o Wellington Hospital with a capacity of 496 beds
 - Kenepuru Community Hospital in Porirua has a capacity of 131 beds and employs 340 health staff.
- The Auckland region has four other general-service-type public hospitals:
 - o Middlemore Hospital in Mangere East with a capacity of 905 beds
 - o Auckland City Hospital with 1,171 beds
 - North Shore Hospital with 647 beds
 - o Waitakere hospital with a capacity of 301 beds

Kenepuru Community Hospital is one of two public hospitals in Porirua. It has a capacity of 131 beds and employs 340 health staff. Porirua Hospital Campus is a Mental Health service with a capacity of 118 beds.

Hutt Valley Hospital employs 1,640 healthcare staff. Lower Hutt has a population of 111,500 and Upper Hutt has a population of 46,000 people.



Auckland City currently has 17 public hospitals, nine of which are dedicated mental health hospitals, two are surgical, one is maternity, and the remainder are general with a range of services such as maternity, surgical, medical, psychogeriatric, geriatric, mental health, and children's health in one hospital. In South Auckland, there is currently four public hospitals with a total bed capacity of 1,023 beds – 905 of those beds are at Middlemore Hospital in Mangere East. None of those four public hospitals are currently based in the Southern Auckland Local Board Areas of Papakura or Franklin.

6.2.1 Shortage of skilled labour in New Zealand's health workforce

In 2023, Te Whatu Ora – Health New Zealand published a <u>Health Workforce Plan</u> which highlighted a large shortage in their current workforce of around 8,320 staff. According to the report, around 250,000 people work in New Zealand's health workforce. 90,000 are employed with Te Whatu Ora, and 160,000 are employed elsewhere. On top of this, the report estimates that in order to maintain current staffing levels, we will need to recruit or train 1,600 more health professionals per year.

According to data released to Stuff under the Official Information Act, Auckland DHB, Counties Manukau DHB, and Waitemata DHB had staffing shortages of 1,128, 731, and 497 vacant FTEs (as at 31 March 2023). According to The New Zealand Nurses Organisation (NZNO), "the 1:3 ratio, of qualified registered nursing staff, is considered the minimum level for providing safe care to patients.".

According to the <u>Nursing Council of New Zealand</u>, 42.6 percent of New Zealand's nurses received their qualification outside of New Zealand. This has increased from 36.4 percent in March 2023.

Table 24 Number of people in the healthcare and social assistance occupation, Auckland region

Occupation	Health Professionals	Health and welfare support workers	Carers and aides	Total
Auckland region	31,743	7,551	22,623	61,917
Auckland DHB	12,162	1,881	5,910	19,953
Counties Manukau DHB	7,956	2,811	8,085	18,852

Source: Census 2018

6.2.2 Residential care workers

The Auranga housing development is building the Karaka Lifestyle Estate. From June 7th, 2024, stage three of the new homes became available. The Park Green development in Karaka has plans for a retirement community called Vivid Living. Ryman Healthcare is also building a new retirement village in Karaka. Ryman's website states that "A state-of-the-art care centre will also be located within the same village community offering rest home, hospital and specialist dementia care". Ryman Chief Executive for New Zealand Cheyne Chalmers said that each village usually required around 150 employees to function. A survey by the New Zealand Aged Care Association (NZACA) showed that New Zealand has a shortage of 1,000 registered nurses in the aged care industry.

A 2018 Aged Residential Care (ARC) <u>profile</u> by the NZACA provides a breakdown of the ARC workforce. Each care facility employs, on average, 47.3 care staff and 16.7 non-care staff (Table 25). The report breaks down the staff into two broad groups:



- 'Care staff' refers to employees working directly with residents and their needs: nurse/clinical managers, registered nurses, enrolled nurses, caregivers, diversional therapists, occupational therapists, and physiotherapists.
- 'Non-care staff' refers to employees who do not have direct contact with residents and their care needs: facility managers, office administration staff, chefs (qualified), cooks (unqualified), kitchen hand staff, garden/maintenance staff, cleaning staff, laundry staff, and home assistants."

Table 25 Average number of staff required per care facility, 2017-2018

	Staff category	Average number of staff/care facility
	Nurse/clinical manager	2.3
	Registered nurse	7.5
±	Enrolled nurse	0.9
Care-staff	Caregiver	33.4
are	Diversional therapist	3
O	Occupational therapist	0.1
	Physiotherapist and assistant	0.1
	Total care staff	47.3
	Facility manager	1
	Office administration staff	1.9
	Chef (qualified)	0.4
taff	Cook (unqualified)	1.4
Non-care staff	Kitchen hand	3.7
-ca	Gardening/maintenance staff	1.9
Š	Cleaning staff	4.3
	Laundry staff	1.7
	Home assistants	0.5
	Total non-care staff	16.7
Total stat	ff	64.1

Source: Aged Residential Care Industry Profile 2017-18



6.3 Construction workers

The construction jobs listed in Table 27 are those required for the developments and does not include the wider infrastructure needs to support the developments in Southern Auckland. From conversations with developers, it became clear that many struggled to find the number of skilled workers required, particularly in earthworks. The majority of construction workers were being sourced from overseas, particularly the Philippines.

Table 26 Employee count for the Southern Auckland construction industry, 2023

	1						,		
	Total	Residential building	Non- residential building	Heavy and civil engineering	Land development and site preparation services	building structure services	Building installation services	Building completion services	Other construction services
Papakura LBA	2,340	310	120	420	160	380	420	150	380
Franklin LBA	3,480	800	160	370	380	230	740	260	540
Drury West	3	0			0	3	0		
Drury East	185	40	21	9	12	55	45	0	3
Runciman	117	6	6		3	9	0	3	90
Drury South Crossing	132	9	0	50	0	18	0	0	55
Waihoehoe	96	18	9	30	0	9	21	0	9

Source: Statistics New Zealand Statistics New Zealand, business demographic statistics.

A 2021 research report by <u>BERL</u>, for <u>Immigration New Zealand and MBIE</u>, found that over half of migrant workers in the construction sector are based in Auckland (52 percent). By far the largest country of origin for migrant construction workers coming to New Zealand in 2020 was the Philippines (43 percent), with China being the second highest country of origin (10 percent). Historically, Malaysia has also been a high source of migrant construction workers.

Table 27 Estimated new additional construction jobs required for developments both planned and underway in Southern Auckland

	Indicative construction jobs	low	high
NZ Steel	Construction (for 60 years)	500	500
Fisher & Paykel Healthcare	Construction and earthworks (over 30-60 years)	700	800
Drury South	Civil construction and builders, short term	8,700	11,500
Auranga	Civil construction, short term	500	500
Auranga	Builders, short term	8,500	8,500
Paerata Rise	Civil construction, short term	500	500
Paerata Rise	Builders, short term	8,500	8,500
Kiwi Property	Construction workers, over the next 3 years	100	300
Sum construction jobs		28,000	31,100

Source: BERL Analysis and Southern Auckland developers

The number of construction workers required varies by the duration of developments, spanning from 2040 to 2075. For developments in which civil works have been completed, these job needs would have ceased. Other developments, such as NZ Steel and F&P Healthcare will have consistent



construction needs spanning out for the next 30 to even 60 years. The start date and completion dates of the nine developments are as follows:

- Fisher & Paykel Healthcare start date 2023, estimated completion date 2075
- NZ Steel start date 2023, estimated completion date 2054
- Blue Float Energy wind farm- construction and installation start date 2031, estimated construction and installation completion date 2033
- Ardmore Airport- start date 2019, estimated completion date 2035-2040
- Drury South Crossing start date 2020, estimated completion date 2027
- Kiwi Property metropolitan town centre start date, 2022, estimated completion date 2042
- Paerata Rise start date 2016, estimated completion date 2030 plus
- Auranga start date 2019, estimated completion date 2030 plus
- Park Green start date 2020, estimated completion date to be confirmed

Table 28 Number of people in the construction and labourer occupations, Auckland region

	Construction trades workers	Construction and mining labourers	Other labourers	Design, engineering, science, and transport professionals
Auckland region	18,033	7,332	19,308	33,561
Auckland DHB	4,218	1,593	4,359	13,170
Counties Manukau DHB	6,339	3,090	8,775	7,944

Source: Census 2018

At the 2018 Census, there were a total of 78,234 people working in construction and labourer occupations in the Auckland region. Of that total number, 31 percent were also employed in building and construction related industries. Out of the remaining 69 percent, 18 percent were working in professional, scientific, and technical services (except computer systems design and related services). The rest were evenly distributed across the other industries.



Table 29 Number of people in the construction and labourer occupations, by building and

construction related industry, Auckland region

Occupation	Occupation group	Skill level	Industry	Non- Māori	Māori
Design, engineering,			Building construction	1,032	66
science, and transport	Professionals	1	Heavy and civil engineering construction	1,068	129
professionals			Construction services	1,374	111
			Building construction	2,994	339
Construction trades workers	Technicians and trades workers	3	Heavy and civil engineering construction	576	168
			Construction services	8,436	1,356
		5	Building construction	861	165
Construction and mining labourers	Labourers		Heavy and civil engineering construction	354	147
			Construction services	1,809	615
			Building construction	630	126
Other labourers	Labourers	5	Heavy and civil engineering construction	495	249
			Construction services	1,026	297
Total				20,655	3,768

Source: Census 2018

Specialist skills

6.4 Engineers

The engineering industry sits within the professional, scientific, and technical services industry. Table 30 shows that currently (2023), there are 96,000 people employed in the professional, scientific, and technical services industry across the Auckland region – two percent (2,230) are in Southern Auckland. Broken down further by those employed in architectural, engineering, and technical services, according to Statistics New Zealand, there are currently 450 people working in this industry in Southern Auckland.

Table 30 Employee count for the Southern Auckland professional, scientific, and technical services industry, 2023

ber vices inaustry, 2020			
	Population	Total professional, scientific, and technical services	Architectural, engineering, and technical services
Papakura LBA	75,800	880	140
Franklin LBA	85,300	1,350	310
Drury	5,140	105	31
Auckland region	1,657,000	96,000	22,500

Source: Statistics New Zealand, business demographic statistics

At the 2018 Census, there were a total of 65,3595 people working in engineering related occupations in the Auckland region. Of that total number, 23 percent were employed in the professional, scientific, and technical services (except computer systems design and related services) industry, 20



percent were employed in manufacturing, 11 percent in construction, and three percent were employed in either hospitals or medical and other health care services.

Table 31 Number of people in the engineering occupations, Auckland region

	Design, engineering, science, and transport professionals	Engineering, ICT, and science technicians	Automotive and engineering trades workers	Total
Auckland region	33,561	15,078	16,755	65,394
Auckland DHB	13,170	4,341	2,844	20,355
Counties Manukau DHB	7,944	4,878	8,049	20,871

Source: Census 2018

6.5 Engineers in energy related specialties

NZ Steel/BlueScope

As part of NZ Steels' expansion and development into clean technology, decarbonisation, and green energy there is a small demand for specialist jobs. NZ Steel estimates that around 10-15 percent of its future workforce will be in specialist engineering jobs, totaling around 100-150 workers. The specialist jobs will be almost exclusively engineers, comprising design engineers, civil engineers, electrical engineers, and process engineers.

According to NZ Steel "there's a group of people who have a very special, specialised skill set that we need for that [new] technology, but there's no kind of immediate issues in terms of bringing them into the country and getting the right group of people to do that project" - Nathan Jones, General Counsel/Regulatory Affairs.

Where NZ Steel anticipates challenges is in the more bespoke energy infrastructure such as the hydrogen hub and batteries. The technology required for this type of bespoke new energy has never before been used or adopted in New Zealand. Alongside that, it's rare anywhere in the world. These people will be "real specialists because it's never happened in New Zealand. [They will be] primarily engineers, project managers, [...] and I suspect will have to be brought in from overseas" – Nathan Jones.

Blue Float Energy

Blue Float Energy, the developers behind the potential wind farm off the coast of Taranaki and Waikato is also in need of engineers. From discission with Blue Float Energy, they outlined the need for a number of workers in engineering. The exact number of workers they require in the Auckland region is very dependent on several factors. Nation-wide, however, they estimate needing around 57 FTE ²³workers who are skilled in "engineering trades including mechanical, hydraulic, electrical, and mechanical technicians" during the construction and installation phase. The construction and installation workforce will be required from 2031-2033.

²³ Please note that the numbers specified are for a scale of 1GW offshore wind project. Therefore, there may be additional FTE requirements in the future.



High and specialist skills needed

The relevant qualifications for the engineering trades roles required in the construction and installation phase are:

- Bachelor of Engineering Technology degree
- University level engineering degree with focus on hydraulics, fluid mechanics, structural engineering, and hydrology
- Additional training or experience specific to hydraulic engineering covering fluid dynamics, pump systems, pipeline design, and electrical systems.

The operations and maintenance workforce will be required from 2033 onwards. Blue Float Energy is currently estimating a requirement for around three to seven FTE electrical technicians per year, three to eight FTE hydraulic and mechanical technicians per year, and four FTE Quality Health Safety and Environment (QHSE) specialists per year. Some of the types of qualifications for the electrical technicians' roles would include:

- Bachelor of Electrical Engineering
- New Zealand Certificate in Electrical Trade (Level 4) or diploma in Electrical Engineering (Level 5)
- Electrical Workers Registration Board (EWRB)
- Global Wind Organization (GWO) Certification.

The relevant qualifications for the hydraulic and mechanical technicians' roles include:

- University level engineering degree with focus on hydraulics, fluid mechanics, structural engineering, and hydrology
- Additional training specific to hydraulic engineering covering fluid dynamics, pump systems, and pipeline design.

The relevant qualifications for the QHSE specialists include:

- Bachelor's degree in fields such as Marine Engineering, Maritime Studies, Environmental Science, or Occupational Health and Safety is beneficial.
- QHSE certifications e.g., The National Examination Board in Occupational Safety and Health (NEBOSH), or the International Organisation for Standardisation (ISO)

6.6 Engineers in healthcare research and development specialties

Fisher & Paykel Healthcare

Fisher & Paykel Healthcare are a well-established research and development company. It has a strong understanding of the challenges that it's trying to solve. To operate successfully, it requires access to a first world healthcare system, access to people, and proximity to hospitals. That is why it has landed in East Tāmaki and is why it is developing a second campus in Karaka.

Fisher & Paykel Healthcare work closely with all New Zealand universities to develop programmes from which it sources many graduates. Examples include <u>The Master of Engineering Studies -</u>



<u>Medical Devices and Technologies</u>, which Fisher & Paykel Healthcare created with Auckland University.

Most of its technical capability comes from graduate engineers, and it employ around 100 graduate engineers each year. One concern Fisher & Paykel Healthcare has over the long run is that its workforce needs might outstrip the number of graduates it can source from those programs. Currently, Fisher & Paykel Healthcare employs some of its specialty workforce roles from overseas such as specialist medical device IP, medical device regulatory, and medical device quality systems.

The workforce constraints they anticipate will be in the technology and research and development engineering roles. Fisher & Paykel Healthcare currently employ over 900 research and development engineers. Alongside that, it is effectively in competition with NZ Steel to find and hire enough engineers to meet their workforce needs. With both companies growing in size and increasing their demand for labour significantly, there is a potential for the supply of high skilled labour in this area to not meet the demands of the region. Fisher & Paykel Healthcare runs many training and upskilling programmes internally. Due to the sheer size of its workforce, it is economical for them to bring courses to them, "One of the things that we do know is that when we develop talent within, it's much stickier and more sustainable and that's kind of what we like".



Table 32 Number of people in engineering occupations, by industry, Auckland region

Occupation	Occupation group	Skill leve	Industry	Non-Māori	Māori
			Building construction	1,032	66
			Heavy and civil engineering construction	1,068	129
			Construction services	1,374	111
Design, engineering, science, and transport professionals	Professionals	1	Professional, scientific, and technical services (except computer systems design and related services)	12,066	543
			Hospitals	318	12
			Medical and other health care services	519	18
			Manufacturing	5,091	294
			Building construction	483	48
	Technicians and trades workers		Heavy and civil engineering construction	555	129
		- 3	Construction services	1,065	138
Engineering, ICT, and science technicians			Professional, scientific, and technical services (except computer systems design and related services)	2,352	135
			Hospitals	459	33
			Medical and other health care services	621	36
			Manufacturing	1,800	138
			Building construction	138	15
			Heavy and civil engineering construction	183	36
			Construction services	510	84
Automotive and engineering trades workers	Technicians and trades workers	3	Professional, scientific, and technical services (except computer systems design and related services)	300	30
			Hospitals	9	_
			Medical and other health care services	15	_
			Manufacturing	5,196	603
Total				35,154	2,598

Source: Census 2018



7 Auckland workforce focus - Māori and Pacific Peoples

Between the 2018 and 2023 Census, the working age population (age 15-64) for the Auckland region increased by 49,185 people (4.6 percent). Therefore, estimates suggest that the Māori working age population in Auckland increased by around 5,629 people and the Pacific Peoples working age population increased by around 7,529 people.

Table 33 Working age population, Census 2013-2023, Auckland region

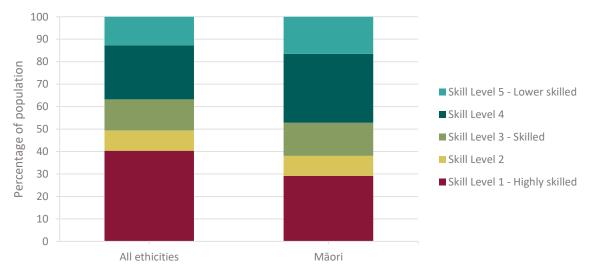
Census year	All ethnicity	Pākehā	Māori	Pacific Peoples
2013	956,037	511,197	88,473	117,339
2018	1,068,705	574,000	122,300	163,600
2023*	1,117,890	*600,417	*127,929	*171,129

Source: Statistics New Zealand.

7.1 Occupation and skill level of the Māori and Pacific Peoples working age population

Figure 24 provides a breakdown of the skill level of the Māori workforce in Auckland alongside the skill level of the total Auckland workforce. It shows that 29 percent of Māori in Auckland are employed in highly skilled occupations. In comparison 40 percent of the Auckland workforce are employed in highly skilled occupations. This finding provides an opportunity to increase the number of Māori working in highly skilled occupations to match the proportion of all ethnicities working in highly skilled occupations.

Figure 24 ANZSCO Occupation skill levels for Auckland, for all ethnicities, Māori, and Pacific Peoples 2023



Source: BERL analysis and Statistics New Zealand



^{*2023} ethnicity figures are estimates. Official statistics for Census 2023 have not yet been released.

Table 34 Median hourly earnings, by occupation and ethnicity, all New Zealand, 2023 (\$)

	Skill level	Pākehā	Māori	Pacific Peoples	Asian	MELAA
Managers	1-2	41.77	34.1	34.58	35	36.23
Professionals	1-2	41.48	38.07	38	42.67	44.56
Technicians and trade workers	2-4	31	29	28.5	29	33.24
Community and personal service workers	2-5	26.37	26.16	26	27	25
Clerical and administration workers	2-5	31.17	30	29	30	30
Sales workers	3-5	24.93	23.75	24.98	24.93	23.05
Machinery operators and drivers	4	28	28	28	28	28.77
Labourers	4-5	26	25.89	25	25	23.64
Total all occupations		33	29	28.5	30	31

Source: Statistics New Zealand, HLFS

Table 35 Median annual earnings, by occupation and ethnicity, all New Zealand, 2023 (\$)

	Pākehā	Māori	Pacific Peoples	Asian	MELAA
Managers	91,208	79,768	71,916	78,000	84,760
Professionals	84,760	76,128	75,816	84,240	86,268
Technicians and trade workers	65,728	64,480	62,400	62,400	68,640
Community and personal service workers	44,876	47,840	51,532	49,868	43,680
Clerical and administration workers	59,852	58,500	59,852	58,812	51,636
Sales workers	46,332	35,724	42,016	49,192	38,064
Machinery operators and drivers	64,896	67,600	59,852	62,400	59,852
Labourers	50,232	52,000	50,960	50,960	47,840
Total all occupations	68,432	62,348	59,800	63,700	64,844

Source: Statistics New Zealand, HLFS, and BERL analysis

Table 35 shows that high skilled management jobs, pay a median annual income of \$91,208 for Pākehā, \$79,768 for Māori, and \$81,916 for Pacific Peoples. High skilled professional jobs, pay a median annual income of \$84,760 for Pākehā, \$76,128 for Māori, and \$75,816 for Pacific Peoples.



Table 36 Estimates of Auckland's workforce by occupation, Census 2018

	Pākehā	Māori	Pacific Peoples
Managers	91,840	11,383	15,626
Professionals	177,940	17,347	33,140
Technicians and trades workers	86,100	17,034	18,063
Clerical and administrative workers	63,140	13,562	23,150
Community and personal service workers	45,920	16,625	19,494
Sales workers	45,920	16,584	18,855
Machinery operators and drivers	22,960	7,543	16,052
Labourers	40,180	22,222	19,220
Total stated	574,000	122,300	163,600

Source: BERL analysis, Statistics New Zealand

7.2 Increasing Māori and Pacific Peoples outcomes in key occupations

Nationally, Table 37 shows that 16 percent of Pākehā are in management occupations, and 31 percent are in professional occupations. In comparison, nine percent of Māori are in management occupations, and 14 percent are in professional occupations. 10 percent of Pacific Peoples are working in management occupations, while 20 percent are working in professional occupations.

Table 37 Proportion of occupations by ethnicity, all New Zealand, 2023 (%)

	Pākehā	Māori	Pacific Peoples
Managers	16	9	10
Professionals	31	14	20
Technicians and trades workers	15	14	11
Clerical and administrative workers	10	11	14
Community and personal service workers	8	14	12
Sales workers	8	14	12
Machinery operators and drivers	4	6	10
Labourers	7	18	12

Source: BERL analysis, Statistics New Zealand

There are two key measures that can be improved for Māori and Pacific Peoples which will have significant economic benefits for Auckland:

- 1. Targeted upskilling to increase the number of Māori and Pacific Peoples working in management and professional roles
- 2. Closing the pay gaps for Māori and Pacific Peoples in these positions.



Table 38 Māori and Pacific Peoples pay gaps by industry, 2023 median hourly earnings, all New Zealand

	Cents in the dollar		
	Māori	Pacific Peoples	
Managers	0.82	0.83	
Professionals	0.92	0.92	
Technicians and trades workers	0.94	0.92	
Clerical and administrative workers	0.99	0.99	
Community and personal service workers	0.96	0.93	
Sales workers	0.95	1.00	
Machinery operators and drivers	1.00	1.00	
Labourers	0.996	0.96	
Total all occupations	0.88	0.86	

Source: Statistics New Zealand, HLFS and BERL analysis

There is an opportunity, via targeted upskilling, training, and workforce planning, to increase the incidence of Māori and Pacific Peoples employment in management and professional jobs to be in line with Pākehā. This would mean increasing the proportion of Māori and Pacific People working in management jobs to 16 percent and increasing the proportion of Māori and Pacific People working in professional jobs to 31 percent. This would increase the available Auckland workforce for these positions by 56,887 people, made up of:

- 20,566 additional Māori in professional occupations
- 17,567 additional Pacific Peoples in professional occupations
- 8,185 additional Māori in managerial occupations
- 10,550 additional Pacific Peoples in managerial occupations

There is also an opportunity, alongside the targeted upskilling, to close the pay gap (evident in Table 34) between Pākehā, Māori and Pacific Peoples. Closing the pay gap would mean that all people earned a median annual income from wages and salaries of \$80,309 for management jobs and \$87,164 professional jobs.

If the pay gap was closed for Auckland's Māori and Pacific Peoples professionals and mangers, then this would inject an additional \$877.8 million into Auckland's economy each year, comprising²⁴:

Closing the pay gap for professionals:

- \$149.7 million into Auckland's Māori economy each year
- \$296.4 million into Auckland's Pacific Peoples economy each year.

²⁴ Calculations are based on working age populations for the Auckland region, and therefore present the value add to the wider Auckland region. It's important to note that around 25 percent of Southern Auckland's workforce will come from the wider Auckland region, (50 percent from the Franklin LBA, and 25 percent from the northern Waikato region).



Auckland workforce focus - Māori and Pacific Peoples

Closing the pay gap for mangers:

- \$130.2 million into Auckland's Māori economy each year
- \$301.5 million into Auckland's Pacific Peoples economy each year.

If both the incidence of Māori and Pacific Peoples working in professional and managerial roles was increased, and the pay gap was closed, then these two measures combined would have a significant economic impact on Auckland's economy.

If both measures were achieved, it would contribute a total of \$5.4 billion into Auckland's Māori and Pacific Peoples economy each year.

Closing the pay gap for professionals, alongside 31 percent of all ethnic groups employed as professionals, would add:

- \$1.89 billion into Auckland's Māori economy each year.
- \$1.78 billion into Auckland's Pacific Peoples economy each year.

Closing the pay gap for managers, alongside 16 percent of all ethnic groups employed as managers, would add:

- \$464.2 million into Auckland's Māori economy each year.
- \$1.3 billion into Auckland's Pacific Peoples economy each year.

100 Labourers 90 ■ Machinery Operators and Drivers 80 Percentage of population 70 ■ Sales Workers 60 ■ Community and Personal Service Workers 50 ■ Clerical and Administrative Workers 40 30 ■ Technicians and Trades Workers 20 Professionals 10 ■ Managers 0

Pacific Peoples

Figure 25 Proportion of occupations by ethnicity, all New Zealand, 2023 (%)

Māori

Source: BERL analysis, Statistics New Zealand IDI

Pākehā



7.3 Industries of the Māori and Pacific Peoples working age population

This section provides a breakdown of the key industries that employ Māori, Pacific Peoples, and Pākehā in the Auckland region. The more detailed analysis focuses on the key industries for growth in Southern Auckland: construction, education and training, health care and social assistance, and professional, scientific, and technical services (the predominant industry for engineering).

Table 39 Estimates of Auckland region's working age population counts by industry, Census 2018

	Pākehā	Māori	Pacific Peoples
Agriculture, forestry, and fishing	5,808	837	798
Mining	420	105	45
Manufacturing	38,694	7,377	15,615
Electricity, gas, water, and waste services	2,847	738	780
Construction	45,180	9,999	9,276
Wholesale trade	32,754	4,755	6,867
Retail trade	36,198	6,228	7,581
Accommodation and food services	19,137	4,278	5,721
Transport, postal and warehousing	18,702	5,985	8,892
Information media and telecommunications	12,741	1,542	1,500
Financial and insurance services	18,402	1,788	2,316
Rental, hiring and real estate services	12,510	1,467	1,281
Professional, scientific, and technical services	67,932	6,051	5,829
Administrative and support services	19,716	4,986	8,820
Public administration and safety	20,664	4,368	5,517
Education and training	43,905	6,594	6,543
Health care and social assistance	39,033	6,234	8,358
Arts and recreation services	10,476	1,896	1,677
Other services	18,669	2,844	3,267
Total people stated	463,785	78,078	100,683

Source: Statistics New Zealand, Census 2018

As shown in Table 40, the most popular industries for Māori in the Auckland region are construction (13 percent), followed by manufacturing and professional, scientific, and technical services. Table 40 presents this information as a proportion of each ethnicity by the industry that they are employed in. It shows that 13 percent of Māori work in the construction industry. In comparison, 10 percent of Pākehā and nine percent of Pacific Peoples work in construction.



Table 40 Proportion of industry by ethnicity, Auckland region(%)

	Pākehā	Māori	Pacific Peoples
Construction	10	13	9
Manufacturing	8	9	16
Professional, scientific, and technical services	15	8	6
Education and training	9	8	6
Health care and social assistance	8	8	8
Retail trade	8	8	8
Transport, postal, and warehousing	4	8	9
Wholesale trade	7	6	7
Administrative and support services	4	6	9
Accommodation and food services	4	5	6
Public administration and safety	4	6	5
Financial and insurance services	4	2	2
Rental, hiring, and real estate services	3	2	1
Information media and telecommunications	3	2	1
Other	9	9	7

Source: Statistics New Zealand, Census 2018

Table 41 shows that for our key industries of interest (health, education and training, and construction) Māori and Pacific peoples have median hourly earnings below Pākehā. Education and training is the industry with the smallest pay gap as Pākehā have median hourly earnings of \$33.86 in comparison to \$33.08 for Pacific Peoples.

Table 41 Median hourly earnings, by ethnicity, all New Zealand, 2023 (\$)

	Pākehā	Māori	Pacific Peoples	Asian	MELAA
All industry groups	33	29	28.5	30	31
Agriculture, forestry, and fishing	28.77	26.99	24.5	27	28.77
Mining	33.72	33.72			
Manufacturing	33.95	29.83	26	30	37.67
Electricity, gas, water, and waste services	35.96	28	30	33.56	
Construction	32	28.79	31	32	30
Wholesale trade	35	33.41	29	31.86	
Retail trade and accommodation	24.7	24	25	25	24.32
Transport, postal and warehousing	32.5	30	28.87	30.23	25.57
Information, media, and telecommunications	45.62	37.16	25	45.55	
Financial and insurance services	47.95	38.72	43.15	39.89	37.4
Rental, hiring and real estate services	34.52	34.2	31.65	38.36	
Professional and administrative services	38.6	33.08	30	36.23	34.04
Public administration and safety	39.32	35.8	34	34.04	27.58
Education and training	33.86	31.02	33.56	33.08	41.71
Health	34.04	29	28.5	31.65	31
Art, recreation, and other services	30	28	27	29.25	27.05

Source: Statistics New Zealand, HLFS



Table 42 presents median annual earning, by ethnicity for each industry. It shows that Māori and Pacific Peoples working in the health industry earn a median annual salary of \$3,484 and \$5,564 below Pākehā respectively.

For the education and training industry, Table 42 shows, that Māori and Pacific Peoples earn a median annual salary below Pākehā of \$5,460 and \$5,720 respectively. For the construction industry, Māori and Pacific Peoples earn a median annual salary below Pākehā of \$4,316 and \$3,016 respectively.

Table 42 Median annual earnings, by ethnicity, all New Zealand, 2023 (\$)

	Pākehā	Māori	Pacific Peoples	Asian	MELAA
All industry groups	68,432	62,348	59,800	63,700	64,844
Agriculture, forestry, and fishing	64,844	57,304	52,936	59,592	77,792
Mining	82,212	106,652			
Manufacturing	74,412	66,196	54,600	64,428	77,792
Electricity, gas, water, and waste services	80,600	65,520	64,844	74,776	
Construction	69,836	65,520	66,820	69,836	64,844
Wholesale trade	79,768	74,776	61,880	66,820	
Retail trade and accommodation	43,004	37,908	43,680	47,320	43,680
Transport, postal and warehousing	72,800	68,328	61,828	69,836	49,868
Information, media, and telecommunications	94,744	66,560	58,500	94,744	
Financial and insurance services	96,720	75,400	89,440	81,796	74,776
Rental, hiring and real estate services	68,796	70,200	68,796	80,288	
Professional and administrative services	79,768	68,640	59,852	76,284	70,824
Public administration and safety	83,252	75,816	72,800	72,800	51,636
Education and training	65,312	59,852	59,592	65,728	79,768
Health	61,828	58,344	56,264	62,712	59,852
Art, recreation, and other services	59,592	54,860	56,264	54,860	54,860

Source: Statistics New Zealand, HLFS



7.4 Increasing Māori and Pacific Peoples outcomes in key industries

An opportunity exists to more efficiently utilise the existing workforce to increase the available workforce required in key industries. Alongside this, action should be taken to close the pay gaps for Māori and Pacific Peoples. Table 43 presents the pay gaps for Māori and Pākehā, and Pacific Peoples and Pākehā for each industry. The table shows that Māori and Pacific Peoples consistently earn less than their Pākehā peers in almost all industries according to Statistics New Zealand's latest Household Labour Force Survey (HLFS).

Table 43 Māori and Pacific Peoples pay gaps compared to Pākehā, by industry, 2023 median

hourly earnings, all New Zealand

	Cents in the dollar		
	Māori	Pacific Peoples	
All industry groups	0.88	0.86	
Agriculture, forestry, and fishing	0.94	0.85	
Mining	1.00	-	
Manufacturing	0.88	0.77	
Electricity, gas, water, and waste services	0.78	0.83	
Construction	0.90	0.97	
Wholesale trade	0.95	0.83	
Retail trade and accommodation	0.97	1.01	
Transport, postal and warehousing	0.92	0.89	
Information, media, and telecommunications	0.81	0.55	
Financial and insurance services	0.81	0.90	
Rental, hiring and real estate services	0.99	0.92	
Professional and administrative services	0.86	0.78	
Public administration and safety	0.91	0.86	
Education and training	0.92	0.99	
Health	0.85	0.84	
Art, recreation, and other services	0.93	0.90	

Source: Statistics New Zealand, HLFS

Professional, scientific, and technical services

The incidence of Māori and Pacific Peoples in the professional, scientific, and technical services can be increased to sit in line with Pākehā (15 percent). This would increase the available Māori workforce in this industry by 10,244 people and the available Pacific Peoples workforce in this industry by 9,273 people. Taking population growth between 2018 and 2023 into account, we can add a further 2,000 Māori and 6,524 Pacific Peoples to the available professional, scientific, and technical services workforce in Auckland.

Closing the pay gap, for the existing workforce numbers, between Māori and Pākehā and Pacific Peoples and Pākehā would pump \$67.3 million into the Māori Auckland economy and \$116.1 million into the Pacific Peoples Auckland economy.



If both the participation gap and the pay gap were closed in professional, scientific, and technical services then this would pump roughly \$518.9 million into the Māori Auckland economy and \$885.8 million into the Pacific Peoples Auckland economy annually.

Construction

As shown in Table 40, 13 percent of Māori, nine percent of Pacific Peoples, and 10 percent of Pākehā work in Auckland's construction industry, which comprises building and engineering construction. Therefore, the participation of each ethnic group in the industry is roughly aligned.

The 2023 median hourly earnings for Pākehā in construction were \$32, compared to \$28.79 for Māori and \$31 for Pacific Peoples. The median annual earnings for Pākehā, based on a 52-hour work week, in construction were \$69,836, compared to \$65,520 for Māori and \$66,820 for Pacific Peoples.

Closing the pay gap for Māori in construction could add around \$43.2 million annually to the Auckland Māori economy. While closing the pay gap for Pacific Peoples in construction could add a further \$28 million annually to Auckland's Pacific Peoples economy.

Table 29 shows that jobs within the construction industry vary from being high-skilled to low-skilled. 17 percent of non-Māori and eight percent of Māori within the construction industry are professionals in high-skilled jobs.

In order to help close this pay gap, action could be taken to increase the incidence of Māori and Pacific Peoples in high-skilled professional roles within the construction industry.

However, as we know from the previous section on occupations, the median annual earnings for Pākehā professionals in 2023 was \$84,760, while for Māori professionals it was \$76,128 and for Pacific Peoples professionals was \$75,816 (Table 35). Therefore, to fully close the pay gap for Māori and Pacific Peoples in construction, the pay gaps for Māori and Pacific peoples within occupations will also need to be addressed.

Increasing the incidence of Māori in high-skilled professional jobs within the construction industry would increase the available workforce in this are by around 640 people²⁵.

Education and training

The incidence of Māori and Pākehā in the education and training industry is similar at nine percent for Pākehā and eight percent for Māori. However, six percent of Pacific Peoples work in education and training.

If you were to close the participation gap (meaning nine percent of Māori and nine percent of Pacific People working in education and training), this would increase the available workforce in the industry by 433 Māori and 2,517 Pacific Peoples.

According to Table 44, 77 percent of non-Māori are employed in high skilled (level 1-2) jobs in the education and training industry, in comparison to 71 percent of Māori. Therefore, upskilling Māori to higher skilled roles within the education and training industry will help to close that pay gap. It will also increase the available workforce in those higher skilled roles by around 395 Māori workers.

²⁵ The more granular data on industry by occupation is only available for Māori and non-Māori



Auckland workforce focus - Māori and Pacific Peoples

Table 44 Skill level of Māori and non-Māori in the education and training industry (%)

Skill level	Non-Māori	Māori
1	71	64
2	6	7
3	3	3
4	18	22
5	3	4

Source: Census 2018

Māori in education and training earn 92 cents for every \$1 their Pākehā colleagues earn, while Pacific Peoples earn 99 cents for \$1 their Pākehā colleagues earn. If we look at median annual earnings, however, Pākehā earn \$65,312, while Māori and Pacific Peoples earn \$59,852 and \$59,592 respectively.

Closing the pay gap, for the existing workforce, between Māori and Pākehā and Pacific Peoples and Pākehā would inject \$36 million into the Māori Auckland economy and \$37.4 million into the Pacific Peoples Auckland economy annually.

Closing the pay gap and increasing participation levels, would inject approximately an extra \$64.3 million into the Auckland Māori economy and an additional \$201.9 million into the Auckland Pacific Peoples economy each year.

Healthcare and social assistance

The incidence of Māori, Pacific Peoples, and Pākehā in the health care and social assistance industry at the 2018 Census was the same regardless of ethnicity (eight percent). Based on the working age population growth between the 2018 Census and the 2023 Census, we estimate that there is currently around 41,000 Pākehā, 6,500 Māori, and 8,400 Pacific Peoples working in health care and social assistance in Auckland.

Closing the pay gap, for the existing workforce numbers, between Māori and Pākehā and Pacific Peoples and Pākehā would inject approximately \$21.7 million annually into the Māori Auckland economy and \$46.5 million annually into the Pacific Peoples Auckland economy.



8 Qualifications and training in the Auckland region

As discussed, the eight new developments alongside projected significant population growth in Southern Auckland will present workforce challenges. The key areas where there are workforce needs and skills shortages include:

- 994 schoolteachers, 553 preschool teachers
- 1,300-2,800 healthcare and social assistance workers, of which roughly 60-70 percent will be nurses
- 28,000-31,100 construction jobs required by developers
- 1,000-1,500 engineers including design engineers, civil engineers, electrical engineers, and
 process engineers, and workers with engineering trades qualifications including mechanical,
 hydraulic, and electrical and mechanical. Alongside this, there is the demand for around 2,2504,900 research and development engineers between now and 2053.

This section presents the current qualifications and fields of study of the Auckland region and New Zealand population, with a particular focus on the relevant qualifications in education, healthcare, trades, building and construction, and engineering.

8.1 Study participation

Across the Auckland region, around one quarter (24 percent) of the population aged 15-34 were enrolled in full-time study at the last census²⁶. Figure 26 shows that a further 70 percent were enrolled in part-time study. For Māori and Pacific Peoples, these numbers are very similar. For Māori in the Auckland region, 21 percent enrolled in full-time study while 75 percent enrolled part-time. In comparison, 22 percent Pacific Peoples were enrolled in full-time study while 75 percent were enrolled part-time.

Table 45 Study participation for all ethnicities, aged 15-34, by LBA (%)

	Full time study	Part time study	Not studying
Papakura	17	77	6
Franklin	24	68	8
Manurewa	20	75	5
Ōtara-Papatoetoe	19	77	5
Māngere-Ōtāhuhu	21	74	5

Source: Census 2018

²⁶ 2023 Census data for study participation at the ethnicity or regional level has not yet been made available. Statistics New Zealand indicates that this data will be made available in <u>June 2025</u>. This report uses Census 2018 data where it is the most recently available data. Education Counts data for 2023 has been used wherever the data is available.



Qualifications and training in the Auckland region

Across the Southern Auckland and South Auckland LBA (Table 45)., Papakura has the lowest proportion of residents enrolled in full-time study (17 percent), while Franklin has the highest (24 percent). Franklin also has the highest proportion of residents not enrolled in study (8 percent).

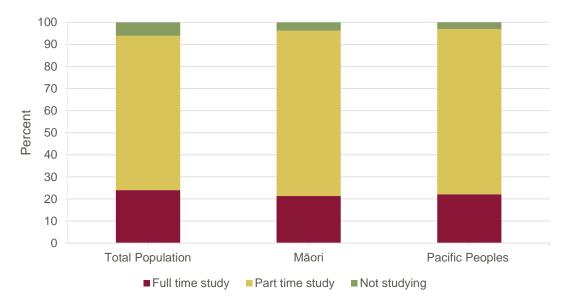
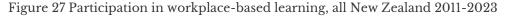
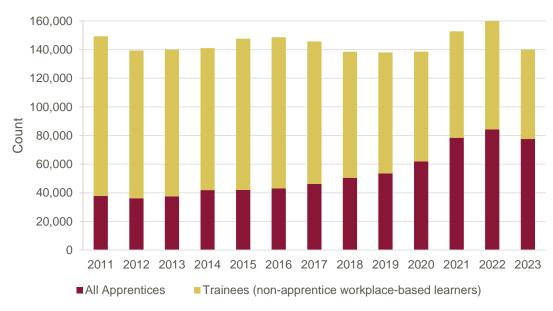


Figure 26 Study participation for people aged 15-34 in the Auckland region, by ethnicity (%)

Source: Census 2018

8.2 Workplace based learning – apprentices and trainees





Source: Education Counts



Industry Training Apprentices
New Zealand Apprentices
Trainees in year (excludes apprentices)

Figure 28 Proportion of workplace based learners by type, all New Zealand, 2023 (%)

Source: Education Counts

Industry training apprentices are trainees whose main programme meets, or exceeds, the New Zealand Apprenticeships level and credit criteria, that is, consisting of 120 or more credits and set at Level 4 or higher of the New Zealand Qualifications Framework. Trainees are non-apprentice workplace-based learners. Their main programme with an organisation does not meet the New Zealand Apprenticeships level and credit criteria described in the note above.

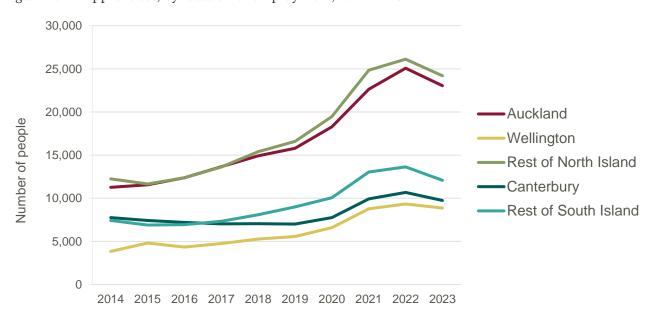


Figure 29 All apprentices, by location of employment, 2014-2023

Source: Education Counts

In 2023, there were 22,400 New Zealand apprentices in Auckland. The total number of New Zealand apprentices across New Zealand was 74,375. This means that one third of New Zealand's apprentices were trained in Auckland.



8.3 Qualifications of the Auckland region population

Around 10 percent of Auckland's total population has no qualification. For Māori and Pacific Peoples this proportion is slightly higher at 12 and 12.6 percent respectively. Around 18 percent of Auckland total population hold a bachelor's degree. For Māori this proportion is much lower at 10 percent, and for Pacific Peoples it is slightly lower at eight percent.

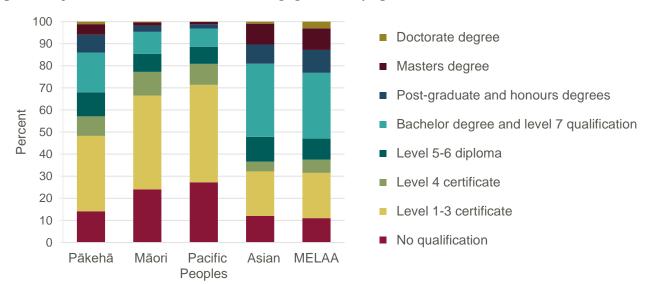


Figure 30 Qualification level of total Auckland population, by age

Source: Census 2018

8.4 Higher education – field of study

The 2018 Census identifies that around 631,227 Aucklanders hold post-school qualifications. The most popular fields of study in the Counties Manukau areas are management and commerce (26 percent), followed by Engineering and related technologies (19 percent), and Society and culture (11 percent) (Figure 31).

Table 46 shows that degrees in the management and commerce field are the most popular across all ethnic groups. Health is the fifth most popular field of study for Pākehā, Māori, and Pacific Peoples. For the Asian population, health is the third most popular field of study (tied with society and culture), and for MELAA health is also the third most popular field of study. Māori and Pacific Peoples are slightly underrepresented in the health field of study, but not by a large amount in comparison to Pākehā and Asian. Eight percent of Māori and Pacific Peoples hold a qualification in health, in comparison to 11 and 10 percent for Pākehā and Asian respectively.



30 25 20 Percent 15 10 5 ■ Auckland Region 0 Agriculture, environmental and related studies Health Architecture and building Management and commerce Creative arts Counties Manukau Education Society and culture Food, hospitality and Natural and physical sciences Information technology Engineering and related technologies personal services

Figure 31 Post-school qualification field of study for the Auckland region and Counties Manukau

Source: Census 2018

Table 46 Field of study by ethnicity, Counties Manukau (%)

	Pākehā	Māori	Pacific Peoples	Asian	MELAA
Management and commerce	20	22	28	32	19
Engineering and related technologies	21	12	10	18	24
Education	12	13	14	7	7
Health	11	8	8	10	15
Society and culture	12	19	18	10	12
Architecture and building	6	5	4	2	3
Creative arts	5	6	5	4	4
Food, hospitality, and personal services	4	8	5	3	3
Natural and physical sciences	4	2	3	7	8
Information technology	2	4	5	6	5
Agriculture, environmental and related studies	2	2	1	1	1
Sum	100	100	100	100	100

Source: Census 2018

100 ■ Agriculture, environmental and related studies 90 ■ Information technology 80 ■ Natural and physical sciences 70 ■ Food, hospitality and personal services 60 ■ Creative arts 50 ■ Architecture and building 40 Society and culture 30 ■Health 20 ■ Education 10 Engineering and related technologies 0 ■ Management and commerce MāorPacific PeoplesAsian Pākehā **MELAA**

Figure 32 Post-school qualification field of study, by ethnicity, for the Counties Manukau DHB

Source: Census 2018

Qualifications in the engineering field of study are also popular. While 21 percent of Pākehā, 18 percent of Asian, and 24 percent of MELAA study engineering and related technologies only 12 and 10 percent respectively of Māori and Pacific Peoples do.

The education field of study is equally popular among Pākehā, Māori and Pacific Peoples with 12, 13, and 14 percent of each ethnic group studying in the education field respectively. The education field of study is also the third most popular field of study for Pākehā, Māori, and Pacific Peoples.

Table 47 Post-school qualification - select fields of study counts, by ethnicity - Auckland region

	Engineering and related technologies	Architecture and building	Health	Education
Total people - ethnic group	81,060	24,153	53,658	44,295
Pākehā	48,495	18,120	33,990	30,405
Māori	3,480	1,773	2,871	3,603
Pacific Peoples	2,997	1,389	2,619	3,690
Asian	26,334	3,900	15,537	8,952
MELAA	2,601	507	1,491	765
Other ethnicity	1,095	264	558	522

Source: Census 2018

Engineering and related technologies

Currently, in Auckland, there are 81,060 people with a post-school qualification in an engineering and related technologies field. Census data tells us that in the Auckland region there are currently 65,394 people in in an engineering related occupation (Table 31). This includes design, engineering, science, and transport professionals (33,561), engineering, ICT, and science technicians (15,078), and automotive and engineering trades workers (16,755). Close to one-third (32 percent) reside in Counties Manukau.



From discussion with stakeholders, there does not appear to be an immediate or pressing shortage of skilled engineers to meet demand. The challenge is more specific to specialised skill sets within engineering professionals – particularly in regard to new technologies in sustainable and green energy.

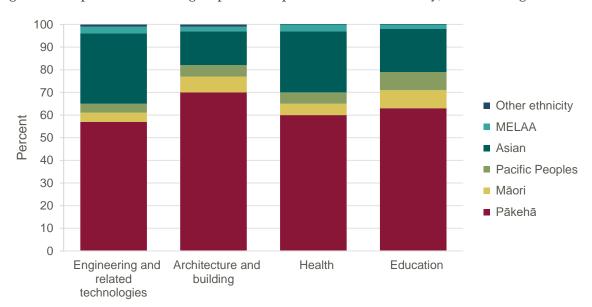


Figure 33 Proportion of ethnic groups in each post-school field of study, Auckland region

Source: Census 2018

Of all people in Auckland with a post-school qualification in engineering and related technologies 57 percent are Pākehā, 31 percent are Asian, four percent are Māori and four percent are Pacific Peoples. For comparison, Pākehā, Asian, Māori, and Pacific Peoples account for 54 percent, 28 percent, 12 percent, and 16 percent of the Auckland regionals total population respectively. Therefore, Māori and Pacific Peoples are significantly underrepresented in the engineering and related technologies field of study.

Table 48 NZQF qualification level for 2023 student enrolments by field of study (%)

	Level 1-2 certificates	Level 3 certificates	Level 4 certificates	Level 5-7 cert/dips	Level 7 Bachelors/ Grad cert/dips	Level 8 Honours and postgrad cert/dips	Level 9 Masters	Level 10 Doctorate
Engineering and related technologies	3	19.	16	9	11	34	5	5
Architecture and building	4	16	25	20	25	4	6	1
Health	0.2	4	5	9	65	9	5	4
Education	1	0.4	3	5	68	8	11	4

Source: Education Counts



Nationwide, over 50 percent of students enrolled in an engineering and related technologies qualification are studying at a bachelor's level or above, with just over one-third enrolled in a Level 8 honors or postgraduate course. A further 4.5 percent and five respectively percent are enrolled in a master's or doctorate degree (Table 48).

Table 49 Breakdown of enrolments in the engineering and related technology field of study, all New Zealand, 2023

Field of study	EFTs	%
Manufacturing, engineering, and technology	295	1
Process and resources engineering	1,240	6
Automotive engineering and technology	2,430	11
Mechanical and industrial engineering and technology	3,470	16
Civil engineering	2,855	13
Geomatic engineering	385	2
Electrical and electronic engineering and technology	6,215	29
Aerospace engineering and technology	1,025	5
Maritime engineering and technology	575	3
Other engineering and related technologies	3,030	14
Total	21,520	100

Source: Education Counts

Table 49 shows that the most popular engineering field of study for students currently enrolled at a New Zealand tertiary education provider is electrical and electronic engineering and technology (29 percent). The second most popular is mechanical and industrial engineering and technology (16 percent), followed by civil engineering (13 percent).

Health

As Table 47 shows, there are currently 53,658 people based in Auckland with a post-school qualification in health. Meanwhile, Table 22 shows that currently Auckland employs 87,900 people in the Healthcare and social assistance industry. By occupation, Auckland region currently employs around 61,917 people in health-related occupations, made up of health professionals (31,743), health and welfare support workers (7,551), and carers and aides (22,623) (Table 24).

Therefore, Auckland will need to facilitate a means to increase the number of qualified healthcare workers in the Counties Manukau (South Auckland, Southern Auckland, and East Auckland areas), if they are to meet the demand, especially bearing in mind the workforce shortages already discussed in the chapter on 'Nurses and doctors'.

Of all the people in Auckland with a post-school qualification in health, 60 percent are Pākehā, 27 percent are Asian, five percent are Māori and five percent are Pacific Peoples. Therefore, Māori and Pacific Peoples are significantly underrepresented in the health field of study in comparison to their share of Auckland's total population.



Table 50 Breakdown of enrolments in the health field of study, all New Zealand, 2023

Field of study	EFTs	%
Medical Studies	3,500	11
Nursing	10,175	33
Pharmacy	1,155	4
Dental Studies	730	2
Optical Science	230	1
Veterinary Studies	2,015	6
Public Health	3,885	12
Radiography	550	2
Rehabilitation Therapies	2,570	8
Complementary Therapies	395	1
Other Health	6,020	19
Total	31,225	100

Source: Education Counts

Table 50 shows that the most popular health field of study for students currently enrolled at a New Zealand tertiary education provider is nursing (33 percent). The second most popular is other health (19 percent), followed by public health (12 percent), and Medical Studies (11 percent).

Nationwide, 82 percent of students enrolled in a health qualification are studying at a bachelor's level or above, with nine percent enrolled in a Level 8 Honors or postgraduate course. A further 5 percent and 4 percent are enrolled in a masters or doctorate qualification respectively (Table 48).

Education

As Table 47 shows, there are currently 44,295 people based in Auckland with a post-school qualification in Education. Meanwhile Table 18 shows that currently, Auckland employs 67,200 people in the education and training industry. This total includes 10,200 employees in preschool education and 34,100 in school education. By occupation, Auckland region currently employes around 41,031 education professionals. According the Post Primary Teachers Association New Zealand is facing a serious shortage of qualified secondary teachers. Therefore, just as with the health sector Auckland will need to facilitate a means to increase the number of qualified teachers in the Counties Manukau (South Auckland, Southern Auckland, and East Auckland) area, if labour supply is to meet the demand.

Of all people in Auckland with a post-school qualification in education 63 percent are Pākehā, 19 percent are Asian, 8 percent are Māori and 8 percent are Pacific Peoples. Therefore, Māori and Pacific Peoples and Asians are underrepresented in the education field of study in comparison to their share of Auckland's total population.



Table 51 Breakdown of enrolments in the education field of study, all New Zealand, 2023

Field of study	EFTs	%
Teacher education	9,735	72
Curriculum and education studies	3,325	25
Other education	495	4
Total	13,555	100

Source: Education Counts

Table 51 shows that the most popular education field of study for students currently enrolled at a New Zealand tertiary education provider is teaching (72 percent), followed by Curriculum and Education Studies (25 percent). Nationwide, 91 percent of students enrolled in an education qualification are studying at a bachelor's level or above, with eight percent enrolled in a Level 8 honors or postgraduate course. A further 11 percent and four percent are enrolled in a master's or doctorate qualification respectively (Table 48).

Architecture and building²⁷

As Table 47 shows, there are currently 24,153 people based in Auckland with a post-school qualification in architecture and building. Meanwhile Table 28 shows that currently, Auckland employs 44,673 workers in construction, trade, and labourer occupations. The architects, designers, planners, and surveyors occupation sits under the 'design, engineering, science and transport professionals' occupation group in which there are 33,561 people in the Auckland region. Also included under the design, engineering, science, and transport professionals occupation group are air and marine transport professionals, engineering professionals, and natural and physical science professionals.

Table 52 Breakdown of architecture and building field of study enrolments, all New Zealand, 2023

Field of study	EFTs	%
Architecture and urban environment	3,670	33
Building	7,290	67
Total	10,960	100

Source: Education Counts

Table 52 shows that over two-thirds of students enrolled in an architecture and building qualification are studying building (7,290 students), and one third are studying architecture and urban environment (3,670 students). Nationwide, 35 percent of students enrolled in an architecture and building qualification are studying at a bachelor's level or above, with four percent enrolled in a Level 8 Honors or postgraduate course. A further six percent and one percent respectively are enrolled in a master's or doctorate qualification (Table 48).

²⁷ The NZSCED broad fields of study definition of 'architecture and building' is the study of the art, science and techniques involved in designing, constructing, adapting, and maintaining public, commercial, industrial, and residential structures and landscapes. It involves the study of the planning, art, and science of designing and adapting the surrounds of buildings and other external environments.



9 Summary - workforce planning

The findings in this report show that population growth alone will not be enough to fill the workforce needs for Southern Auckland in the future. While the projected population boom in Southern Auckland presents a unique opportunity, increasing the population of an area from 5,140 people to 60,000 requires significant physical and social infrastructure. With large population growth comes further requirements for teachers, doctors, and nurses to support that population. As mentioned throughout the report, the construction sector, education sector, and healthcare sectors all have significant struggles training, sourcing, and retaining staff. This is a shortage that is only going to grow if swift, targeted action is not taken.

This report highlights the need to proactively address the skills gaps and workforce shortages in key industries, alongside the opportunities available to the region's economy if they were to successfully bridge this gap. Addressing the skill and workforce shortages in the key industries — such as health and social assistance, education and training, construction, and professional, scientific, and technical services — will be integral to Southern Auckland's growth.

The growing Māori and Pacific Peoples population further enhances the need to address the underrepresentation of Māori and Pacific Peoples in key occupations and sectors. There is an opportunity, via targeted upskilling, training, and workforce planning, to increase the representation of Māori and Pacific Peoples in industries that are key to Southern Auckland's growth. If steps were taken to facilitate this uptake, so that Māori and Pacific People are equally represented, it would increase the available Auckland workforce for these industries by:

- 10,240 Māori and 9,270 Pacific Peoples in the professional, scientific, and technical services industry
- 430 Māori and 2,520 Pacific Peoples in the education and training industry
- 28,750 Māori and 28,100 Pacific Peoples in professional and management occupations

At a high-level, this report finds that if the gaps in both the rate of representation and pay were closed for Auckland's Māori and Pacific Peoples (in comparison to Pākehā) it would inject around \$1.8 billion into Auckland's economy each year.

A comprehensive plan that includes the community, education sector, and central government will be needed to ensure that the Māori and Pacific Peoples population has the necessary skills and qualifications for the region's future workforce needs. This plan should also look to close the supply and demand gaps in the labour market that are driving skilled workers <u>overseas</u>. The large employment needs created by new developments in the area will require the region to have the amenities required to entice and enable the workforce to reside in the area. Alongside this, two of the proposed developments are working with new and bespoke technology that has never been done before in New Zealand. This requires being able to attract specialist staff to the region.

This report creates a jumping off point from which to bridge the gap between the training, employment, and wages of Pākehā, Māori and Pacific Peoples in the region. This report is designed



to better enable engagement between Auckland Council and the regions and especially with Māori and Pacific Peoples communities.



Appendix A Multiplier Analysis – Employment

Multiplier analysis uses multipliers derived from inter-industry input-output tables for Aotearoa New Zealand. Input-output tables are derived from the national input-output tables and other data by Butcher Partners, Canterbury, a recognised source for regional input-output tables and multipliers.

Multiplier analysis is a conventional and well understood method for quantifying the economic impacts of the construction, maintenance, and operation of proposed investments. It is a partial equilibrium method which uses multipliers derived from inter-industry input-output tables for Auckland to track how money ripples through the city's economy.

The contribution of construction and operation to Auckland's economy is not limited to the value it creates directly. An increase in expenditure (output) has repercussions throughout the whole economy, causing effects beyond the initial increase in production.

This is known as the multiplier effect which can be broken down into three impacts:

- **Direct** referring to the direct economic activity generated by the industry, such as money spent on capital costs and operations.
- **Indirect** referring to economic activity generated by industries associated downstream and upstream to the industry, for example through businesses purchasing additional goods and services to cater for an increasing workforce.
- **Induced** referring to economic activity generated by industries not associated with the industry in the value chain, but still affected by the additional economic activity. This includes, for example, the spending of income earned by facilities managers and facilities administrators on consumer goods and services.



Appendix B Southern Auckland

Southern Auckland has a current population of around 161,100 people, which includes the Papakura and Franklin LBAs. The two Southern Auckland Local Board Areas of Franklin and Papakura are bordered in the north by the Howick and Manurewa Local Board Areas. South of Southern Auckland sits the Waikato District local territorial authority. Other South Auckland local boards include the Otara-Papatoetoe and Managere-Otahuhu Local Board Areas.

Papakura local board are

The Papakura LBA has a population of around 75,800 people. It extends from Drury in the south up to Alfriston in the north, and includes Takanini, Hingaia, Red Hill, Pahurehure, and the current Papakura town centre.

Suburbs in the Papakura LBA:

- Conifer Grove West
- Takanini
- Papakura
- Red Hill
- Ōpaheke

- Karaka Lakes
- Hingaia
- Pahurehure
- Rose Hill
- Drury East

- Harbour View
 Heights
- Twin Parks Rise

Franklin local board

The Franklin LBA has a population of around 85,300 people. It spans the eastern coast of the Hauraki Gulf to the western coast of the Manukau Harbour.

Suburbs and townships in the Franklin LBA:

- Ardmore
- Clevedon
- Hunua
- Waihoehoe
- Drury South Crossing
- Runciman
- Ramarama
- Kingdeat-Karaka

- Karaka Creek
- Glenbrook
- Pukekohe
- Paerata
- Patumāhoe
- Puni
- Bombay
- Clarks Beach
- Āwhitu

- Manukau Heads
- Pollok
- Waiuku
- Kawakawa Bay
- Ness Valley
- Whitford
- Beachlands
- Maraetai
- Ōrere Point



Drury

Drury is currently a small rural town with a population of 5,140. It sits across both LBAs and situated within an hour's drive of close to half of New Zealand's population. With South and East Auckland on Southern Auckland's northern border and the Waikato district to the south, Drury is a 49-minute drive from Auckland's Queen Street (37.2km) and a 27-minute drive to Manukau City Centre (17.6km). The suburb of Drury, is roughly a one hour's drive to Hamilton CBD (87.9km)

This report defines the Drury area at the 2023 statistical area 2 (SA2) level.

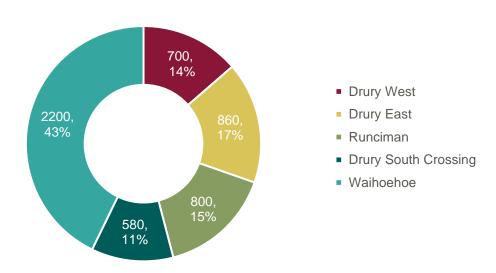
Boundary changes have been made to the Drury area between the 2018 and the 2023 Census'. At the 2018 Census, Drury consisted of two SA2s:

- Drury, and
- Drury Rural.

At the 2023 Census, however, Drury was split into five SA2s:

- Drury West,
- Drury East,
- Runciman,
- Drury South Crossing, and
- Waihoehoe.

Figure 34 Population of Drury, 2023 admin census (%)



Source: Statistics New Zealand,

Figure 34 shows the population of the Drury area. The area with the largest population is Waihoehoe, with a total projected population of 2,200, or 43 percent of the total Drury area. The



next most populous area is Drury East, which includes a large proportion of Drury township. Drury East has a population count of 860 or 17 percent of the total Drury population.

At the 2018 Census, Drury Rural had a population of 2,763 and a median age of 45.4 years, while Drury had a population of 1,197 and a median age of 36 years.

Counties Manukau DHB

The Counties Manukau DHB covers the South Auckland, Southern Auckland, and East Auckland LBAs. While DHBs were replaced by Te Whatu Ora (Health New Zealand) in 2021, Statistics New Zealand still has relevant data for residents in this area, specifically Census 2018

Table 53 Summary of all public hospitals in Auckland

Premises Name	Service Types	Total Beds	Premises Suburb
Auckland City Hospital	Maternity, Surgical, Medical, Childrens health	1171	Grafton
Auckland DHB X 3 Units - Mental Health	Mental health	96	Grafton
Buchanan Rehabilitation Centre	Mental health	40	Point Chevalier
Greenlane Clinical Centre	Surgical, Medical	31	Epsom
Auckland Spinal Rehabilitation	Medical	20	Papatoetoe
Botany Downs Hospital	Maternity	20	Golflands
Manukau Surgery Centre	Surgical	78	Wiri
Middlemore Hospital	Maternity, Surgical, Medical, Psychogeriatric, Geriatric, Mental health, Childrens health	905	Mangere East
Tāmaki Oranga	Mental health	20	Papatoetoe
Elective Surgery Centre	Surgical	30	Takapuna
He Puna Waiora	Mental health	35	Takapuna
Mason Clinic	Mental health	126	Point Chevalier
Medically Managed Withdrawal Service	Mental health	10	Auckland Central
North Shore Hospital	Geriatric, Mental health, Childrens health, Maternity, Surgical, Medical, Psychogeriatric	647	Takapuna
Waiatarau Inpatient Mental Health Unit	Mental health	32	Henderson
Waitakere Hospital	Geriatric, Mental health, Childrens health, Maternity, Surgical, Medical	301	Henderson
Wilson Centre	Physical, Childrens health	30	Hauraki

Source: Ministry of Health

