

# Otago Construction Labour Forecasting

## Post COVID-19 Update and Executive Summary

July 2020

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For the following Key stakeholders:

Ngāi Tahu  
Ministry of Social Development  
Dunedin City Council  
Waitaki District Council  
Clutha District Council

Otago Chamber of Commerce  
Otago Southland Employers Association  
Central Otago District Council  
Queenstown Lakes District Council



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# COVID-19 Update

The core information in this report was researched and written in the six months prior to the impact of COVID-19 being fully felt in New Zealand. While much of information in the original draft, completed as New Zealand went into lockdown, remains highly valuable in managing the impact of COVID-19 on the Otago region, the activity and labour forecasts contained in the March version of the report have been reviewed and additional information added relating to the construction labour market in July, as we look to the future and our new reality.

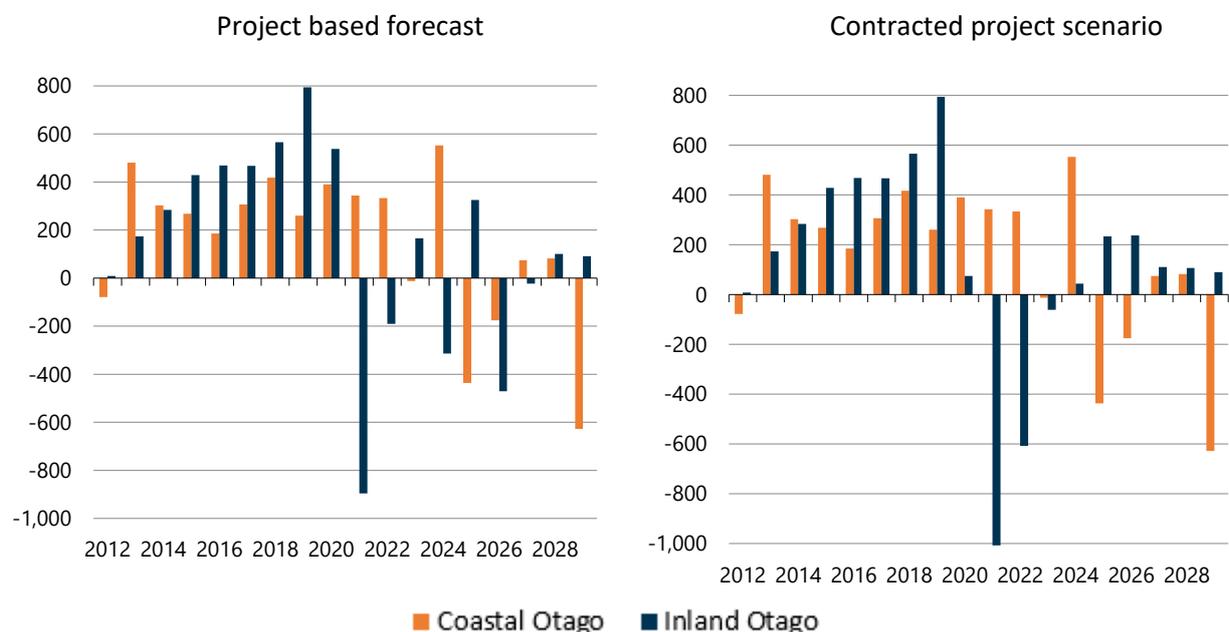
As part of its initial response to the rapidly unfolding COVID-19 situation, Infometrics updated its employment forecasts for the construction industry in late April and early May. Those forecasts were prepared based on analysis of the labour resourcing decisions that businesses were expected to make across the economy.

Since those forecasts were prepared, the positive public health outcomes and relatively quick return to Alert Level 1 have raised hopes that the economic ramifications of the pandemic might not be as impactful as initially feared. On-the-ground discussions with people in the construction industry in Otago, and indeed across the country, also suggest that the pipeline of work remains intact for now, and that job losses in the short term will be limited.

This sentiment helps explain the divergence between the employment projections in this report and the more negative forecasts previously published in Infometrics' Regional and Sector profiles. Nevertheless, there is still potential for construction activity to soften and while many projects have not been publically cancelled, there is concern that in Inland Otago especially there are a number of privately funded projects which will not proceed as forecast. The cancellation of several major projects in the region would reduce the employment projections in the demand-side modelling that Infometrics has undertaken for this report, bringing the figures more in line with Infometrics forecasts from May.

By way of an example, there are 14 hotel projects within the projects list of 123 major projects across Coastal and Inland Otago. If all of these were to be cancelled there would be a reduction in labour demand of approximately 1,000 trades people per annum, equal to the peak forecast of the New Dunedin Hospital project. It is unlikely all projects will be cancelled as some are nearing completion while others may be delayed or put on hold. Rather than try to pick which project will and will not proceed and to help visualise the variation, the project presents two forecasts for the Otago Region with significant variations in the Inland Otago scenarios.

**Graph 1. Projected annual growth (decline) in employment by sub region**



## Economic overview

The COVID-19 pandemic and lockdown have had significant effects on employment and the economic outlook. Tourism, international education, and hospitality have been the most heavily affected sectors, with border closures and restrictions on people's movements substantially reducing businesses' revenue and undermining profitability. However, the effects of the pandemic have not been limited to these sectors, and the lockdown and its aftermath have seen a swathe of job losses throughout the economy.

Business confidence in the construction sector across both Coastal and Inland Otago is generally optimistic with most builders still having six months or more of work ahead of them. This is reflected in BCITO trainee numbers in Otago which increased very slightly (1.1%) since 1 March (just before COVID 19) compared with 1 July. This is driven by decreases in Central Otago (7.7%) and Queenstown-Lakes (2.7%) offset by an increase in Dunedin City (4.2%).

Business confidence however, is not universal across all sectors of the economy. In May 2020 there were 109,400 people in employment in Otago. This is about 2,400 (2.1%) fewer people than in March 2020, the last month of pre-COVID employment.

The number of people on a Jobseeker benefit in Otago also increased from 3,900 in mid-March 2020 to 5,700 in mid-June 2020, an increase of 1,800 or 46%. The percentage increase in Jobseeker benefits is particularly high in Inland Otago, especially in Queenstown-Lakes where the number of jobseekers increased from 73 in March 2020 to 525 in May 2020, an increase of more than 600%.

## Effect on construction

Construction activity is highly reliant on confidence across a range of areas: lenders, developers, prospective owners or tenants, and households. A lack of confidence in each of these areas will reduce residential and/or non-residential construction over the next 1-2 years, at least:

- Banks are concerned about falling property values and an increase in bad loans, making finance for property purchases and construction much more difficult to obtain;
- Developers are worried about the potential for falling property prices and reduced demand resulting from slower population growth and other weaker macroeconomic drivers such as employment and spending activity;
- Prospective owners or tenants are concerned about business cashflow and are reluctant to commit to investment or other major business decisions; and
- Lower consumer confidence and job security have reduced households' willingness to spend.

Against this backdrop, prospects for residential and non-residential construction activity are weaker. Infometrics projections of business-as-usual (BAU) levels of construction work (that were provided in the initial report on the outlook for construction workers and skills in Otago) showed that, in general, activity was expected to weaken as demand retreated from its cyclical highs in 2019/20. This outlook was particularly true for Inland Otago, where residential activity appeared to be well in excess of what could be justified by population growth.

The COVID-19 pandemic is expected to have a more significant effect on the likelihood of some major projects identified in our previous work being deferred or cancelled entirely.

- The situation will be particularly critical for accommodation building, with a substantial and sustained decline in tourist numbers and activity devastating the business case for any new facilities during 2020 and 2021.
- Demand for retail space is likely to trend lower given weaker domestic and tourist spending as well as the accelerated shift towards online shopping that was encouraged by the lockdown. Job losses and the potential for an increase in the prevalence of working from home could also have medium-term implications for office space demand.

- Unlike residential and non-residential activity, infrastructure work is likely to be stronger over the next five years as the government looks to stimulate the economic recovery. To date, the government has allocated \$3b of funding for "shovel-ready" projects that can be brought forward to help accelerate growth, inviting applications from district and regional councils, iwi authorities, NGOs, and the private sector. Although the list of recommended projects has yet to be released by either the government or Crown Infrastructure Partners, it is believed that almost 2,000 projects have been submitted, totalling \$136b.

The \$3b of funding for shovel-ready projects comes on top of the government's \$12b NZ Upgrade Programme that was detailed in January this year. As part of the process of accelerating infrastructure spending, the government has also moved to streamline approval for infrastructure activity by enabling specific projects to bypass the usual resource consent process over the next two years.

In conclusion, the COVID-19 pandemic is set to be the catalyst for a quicker, and possibly more pronounced, drop-off in construction activity than would otherwise have occurred. However, over the medium term, it is likely to have limited implications for BAU activity levels.

### Other changes to input data

While preparing this update in response to the COVID-19 pandemic, we have also taken the opportunity to include new and revised figures for several data series. These updates include building consent data to the March 2020 quarter, amended estimates of employment up to March 2019, and revised infrastructure estimates at both a national and regional level.

In most cases, the effects of these updated figures on our demand projections is relatively minor. However, there are a few specific instances where the changes warrant a comment.

Construction employment levels in **Clutha** are significantly higher in 2018 and 2019 than indicated by previous estimates. In broad terms, these revisions have not altered our forecasts of future changes in demand for construction workers in Clutha, but the higher starting point means that our projected levels of worker demand over the next few years are also higher.

Residential consent numbers in **Queenstown-Lakes, Dunedin, and Waitaki** in recent quarters have been stronger than our previous BAU track had suggested. These consents imply greater momentum in residential activity and additional demand pressures for workers in the near-term, notwithstanding the likely negative effects of COVID-19 on activity throughout the remainder of 2020 and 2021.

Significantly higher estimates of **infrastructure** activity by Statistics NZ from 2017 onwards have flowed through into increased BAU levels of infrastructure work over the medium term. This change has occurred because, in part, our future BAU infrastructure estimates rely on the historical relationship between activity and population growth. Nevertheless, this upward revision is consistent with the increased government focus on infrastructure investment in response to the current recession.

### Outlook for activity and employment

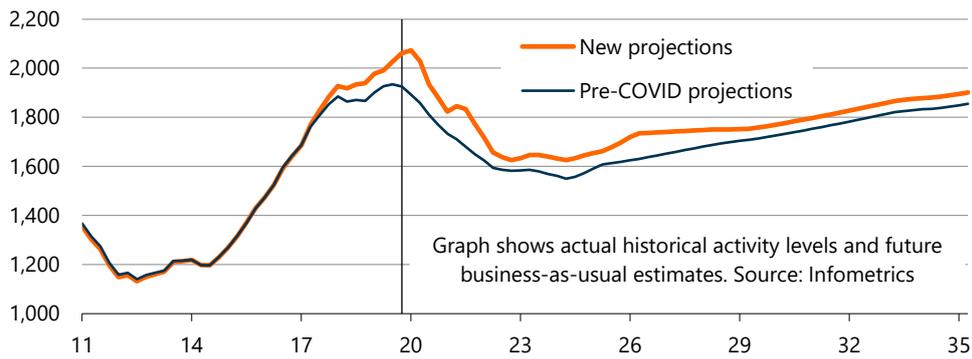
Reflecting the changes outlined above, the starting point for total construction activity across Otago in the year to December 2019 is 7.1% above the BAU estimates we previously provided. Much of this upward revision is due to higher estimated levels of infrastructure activity, with smaller upwards shifts in residential and non-residential building work.

Throughout the 2020-2025 period, our revised estimates of total BAU activity levels across Otago are between 2.8% and 9.5% higher than our previous estimates (see Graph 2). This change reflects sustained higher levels of infrastructure activity, due to the combination of the higher starting point as well as the government's focus on using infrastructure spending as a means of stimulating the economy's post-COVID recovery.

Graph 2.

### Otago construction work put in place

Annual running totals, Mar 2019 \$m



Apart from a post-lockdown catch-up in 2020/21, we estimate that BAU levels of residential construction will be slightly lower throughout the next five years. The BAU outlook for non-residential activity is little changed, apart from the current pipeline of consented projects being worked through over the next 18 months. We note that the economic downturn presents downside risks to non-residential activity, with less favourable business conditions increasing the possibility of postponement or cancellation for projects that have already been consented.

Beyond 2025, our BAU projections for construction work have been revised up slightly due to higher baseline levels of infrastructure activity.

### Coastal Otago

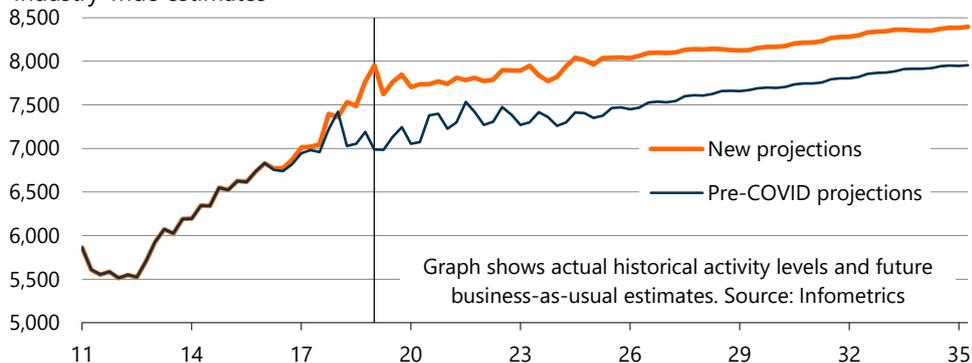
In broad terms, the projected track for BAU levels of construction employment in Coastal Otago follows a similar pattern to our pre-COVID projections, except with total employment at a higher level. This level shift reflects our revised understanding of the construction workforce in Coastal Otago during 2018/19, which implies that construction employment in this part of the region is about 9% higher than we had previously estimated.

The economic downturn makes it unlikely that all these additional workers will be retained in the near-term, although our new BAU projections for construction employment by March 2022 are still almost 7% higher than previous estimates (see Graph 3). Between 2022 and 2025, our projections of BAU employment in Coastal Otago range between 5% and 9% above our previous estimates. Employment levels are then expected to settle about 5-6% above previous estimates over the longer term.

Graph 3.

### Construction employment in Coastal Otago

Industry-wide estimates

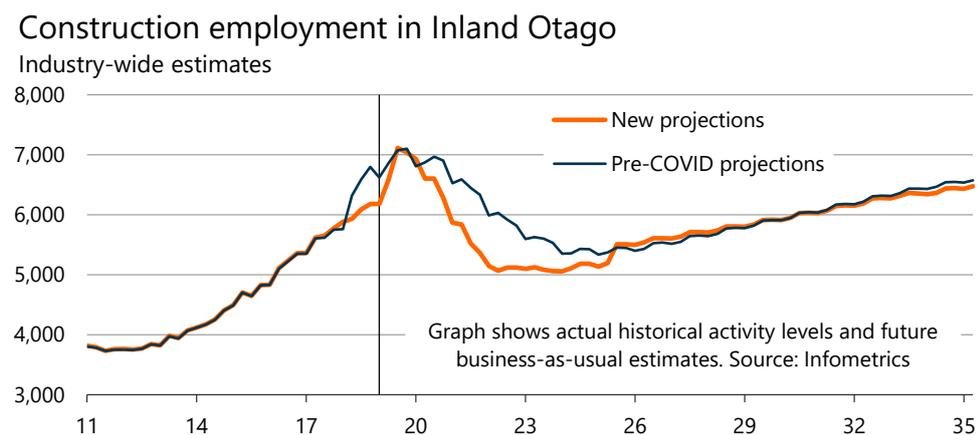


## Inland Otago

The effect of COVID-19 on construction employment in Inland Otago is expected to be more substantial. Strong growth in employment during 2019 is expected to give way to sizable falls in job numbers between now and 2022. Slower population growth will hit residential activity, while the loss of international tourism will significantly undermine the ability and willingness of firms to invest in new non-residential buildings in Queenstown.

BAU construction employment levels in Inland Otago are projected to decline 23% over the two years to June 2022, which would leave employment 12% below our pre-COVID projections (see Graph ). Construction employment is projected to bottom out in early 2024, with the trough in job numbers sitting 5.2% lower than our previous projections.

Graph 4.



In summary, the after-effects of the COVID-19 pandemic and lockdown are likely to reduce demand for construction workers in Inland Otago over the next two years and expedite our anticipated correction in construction activity. It is also worthwhile reiterating Graph 4 only shows BAU estimates of employment, and the potential for deferral or abandonment of major projects could also reduce demand for workers compared with our previous projections.

Nevertheless, our previous work suggested that labour and skill shortages in Inland Otago looked likely to be particularly critical over the next few years if the pipeline of construction projects had progressed as expected. The softer outlook for construction activity implies that capacity constraints will be less problematic for those people and businesses still looking to push ahead with construction work.

Coastal Otago still faces significant resourcing pressures associated with construction of the new hospital in Dunedin, with COVID-19 not expected to make much difference to underlying demand for construction workers. Arguably the biggest change caused by COVID-19 is the likely increase in unemployment in the region, which will boost the potential supply of workers that can be trained and brought into the Dunedin Hospital project.

However, offsetting this boost to the potential supply of labour, we note that the current border restrictions have effectively removed the ability of firms to source workers from overseas. While they remain in place, these restrictions could significantly restrict the availability of people to fill highly skilled and specialised roles within particular construction projects.

# Executive Summary

## Additional Documentation and data

This report provides an updated view of the Otago Construction Workforce and repositions the data, findings, issues and opportunities in a post COVID-19 Context. It provides detailed insights, case studies and supporting information in support of the Otago Construction Labour Forecasting ancillary report.

The ancillary report was written prior to the COVID-19 Lockdown on March 25<sup>th</sup> 2020, some sections on the impacts of COVID-19 on vulnerable groups has been added and graphs and associated text relating to forecast figures has been updated but the full narrative and language of the report has not been updated in light of COVID-19 impacts. Many of the findings are highly relevant but should be read in conjunction with this report:

Also part of the project documentation and deliverables are:

- Construction activity and demand for workers in Otago: a 15-year outlook for Dunedin City Council February 2020
- Otago Construction Workforce Forecasting tools *project* and *contracted* versions July 2020

## Background

Construction in Otago has been booming with significant commercial, residential and infrastructure projects started or completed in the eight years up to 2020, many more were planned for the next decade including the new Dunedin Hospital. The current and planned activity meant the sector was already working near capacity with labour, particularly skilled labour, in short supply. That created a real risk that there would not be the number of workers required with the right skills to put planned projects in place.

In that context a consortia of the local councils and economic development agencies that make up the Otago region, together with Ngāi Tahu and the Ministry of Social Development, initiated a project to examine the demand for construction labour. The project aimed to:

- Create a complete picture of significant construction projects in Otago from 2020 – 2035
- Forecast demand for labour, at both a local and occupational level
- Provide options for meeting forecast demand

The project was subsequently expanded to include forecast supply of labour into the sector.

This report summarises the findings from the project. It has four main sections:

- Major projects
- Opportunities for the construction sector
- Supply of and demand for labour
- Recommendations for next steps

In addition:

- The Infometrics report, ***Construction activity and demand for workers in Otago: a 15-year outlook***, provides further detail, including methodology, about the forecasting of demand for labour; and
- The main ***Otago Construction Sector Opportunities Outlook*** report which expands on and provides examples of opportunities identified through the development process as well as a detailed analysis of the historical labour supply channels across the Otago region.

Please note these reports have not been updated post COVID-19 lockdown.

## Projects

Otago has a large number of major construction projects planned over the next 15 years. There are a few very large projects, most notably the new Dunedin Hospital, which have a high public profile. Sitting alongside the high profile projects are a number of projects with significant values that are over and above what *might* be built during business as usual.

As at the beginning of July 2020, there were 88 projects planned over the next 15 years with a value of \$20 million or more, including 14 projects with a value over \$200 million. Collectively these projects had a combined value of just under \$10 billion. Coastal Otago had \$3.3 billion of projects, almost all in Dunedin City, while Inland Otago had \$6.4 billion worth of projects, located primarily in Queenstown, Wanaka and Cromwell.

The types of project are very different between the two parts of the region:

- In Coastal Otago, the new Dunedin hospital makes up 42% of total project spending with education adding another 28% and infrastructure a further 21%. This means that more than 90% of project funding is publicly driven; and
- In Inland Otago almost 90% of funding involves private or commercial investment.

These different sub-regional drivers mean that solutions to meeting labour demand in each area need to be different. There is also considerably higher risk of projects not happening in Inland Otago, with commercial investors more likely to delay, or change plans, if economic or labour market conditions deteriorate.

It is important to note that the total build value, split by *Projects* and *Business as Usual* in this report, has been checked against an independently sourced list of vertical and horizontal construction projects across the Otago Region from Pacifecon Ltd in May 2020 with only a 1% variation.

## Issues and opportunities for the construction sector

### Volume and Timing

On the demand side, if the current list of projects continues as planned it is unlikely that the natural supply of labour in Otago will meet construction industry demand in the near term. If the Inland Otago market slows, as forecast in the short term, the timing of labour availability is unlikely to be matched by demand in Coastal Otago or Southland.

The volume of labour surpluses in Inland Otago is likely to be tempered by a reduction in the number of lower skilled migrants on work visas (defined by Immigration New Zealand from 27 July as earning less than the median New Zealand wage of \$25.50 per hour) labour force in Inland Otago. labour workforce issue

### Supply

On the supply side, there are likely to be impacts of the availability of migrant labour, which has made up 14% of new trade labour on average over the past five years. The process for requesting an exception for “other critical workers” (formerly essential workers) is being managed by Immigration New Zealand. The bar for being granted an exception to the border restrictions is set high to help stop the spread of COVID-19 and protect the health of people already in New Zealand.

We are advised by the Ministry of Education that holding an existing essential skills visa or being employed in a position that is on the skills shortage list is not sufficient to meet the ‘critical worker’ criteria for this process. Therefore, solutions need to be developed to ensure that there are enough workers, with the right skills, to deliver projects as planned. Given the size of the shortfall currently even in the changing wider economic context, there is unlikely to be any one solution that will solve the labour demand challenge. Instead, a range of solutions need to be put in place.

## Overarching themes

During the course of this project we consulted with a wide range of stakeholders from different parts of the Construction sector throughout the Otago region. Stakeholders initially identified the issues facing the sector and then moved to focusing on opportunities to address these challenges.

The theme that has emerged most strongly through all opportunities is connectedness. This includes connections between people, businesses, agencies, programmes, and even physically through transport and infrastructure. Many of the barriers people identified arose when these connections broke down.

Overarching considerations that people identified all aim to increase this connectedness, and should be taken into account regardless of which individual initiatives or solutions are put in place. These include coordination in initiatives, planning and information sharing, and using local and central government levers.

There is a growing recognition that the construction sector needs to get better at working collaboratively to meet future need. The Government and some major construction firms are attempting to respond to this challenge through the Construction Sector Accord. The impact of this is yet to be seen and will be dependant on how much of the thinking can be put into practice.

At a local level, there are a number of things that can be done to improve connectedness, including better coordination of initiatives, information sharing, and collective lobbying of Government.

## Four focus areas

Stakeholders identified four focus areas with the biggest potential to help meet the demand for construction labour. These were:

- Attracting workers
- Supporting Employers
- Supporting workers
- Accommodation

Each of these areas are interlinked and cannot be considered in isolation. Many solutions or actions fit within one of the four focus areas but have connections to one or more of the other areas.

Figure 1.

Four focus areas for meeting construction demand in Otago



## Skills Hub

One of the solutions that been established for Coastal Otago is a construction skills hub based around Dunedin Hospital. The proposed skills hub is currently being called 'Workplace Central'. It is envisaged that there will be two distinct phases for this skills hub, pre-build and during the build:

1. Pre-build – the primary purpose is to sell the sector in general, and hospital build in particular, to prospective workers including young people, those not in work, and other career seekers.
2. During the build – the hub would focus on recruitment, retention, induction programmes, health and safety, culture, work skills, mental health, pastoral support and skills development.

There are five areas that need to be considered further relating to the design, number and location of a skills hub in Otago. These include:

1. Whether it is a physical building or something different
2. Functions that it should perform during the lifecycle of significant projects
3. Who will fund it?
  - Will funding channels change as the form and function of the hub changes
4. Number and coverage
  - Just the hospital build or Dunedin City
  - Coastal Otago, Inland Otago or all of Otago
5. Government interventions

## Fees free training

The Targeted Training and Apprenticeships Fund (TTAF; also known as free trades training) will support learners to undertake vocational education and training without fees.

The TTAF will cover fees from 1 July 2020 until 31 December 2022 and will be paid directly to tertiary education organisations (TEOs) by the Tertiary Education Commission (TEC). This will enable TEOs to provide education and training without fees to learners.

TTAF will make a range of training and apprenticeship programmes at sub-degree level free for learners. It is targeted towards industry skill needs where demand from employers for these skills will continue to be strong, or is expected to grow, during New Zealand's recovery period from the impacts of COVID-19.

See the list of eligible programmes and qualifications. <https://www.tec.govt.nz/funding/funding-and-performance/funding/fund-finder/targeted-training-and-apprenticeship-fund/qualifications-and-programmes/>

Study in the following areas is covered by the TTAF:

- All apprenticeships
- Level 3-7 sub-degree programmes in targeted areas delivered by tertiary providers
- Industry training, outside of apprenticeships, in targeted areas.

The targeted areas are:

- Primary industries, including agriculture, horticulture and viticulture, fisheries and forestry;
- Construction, including building, plumbing, and civil engineering;
- Community support, including youth work, care for elderly, counselling, and community health including mental health and addiction support
- Manufacturing and mechanical engineering and technology;
- Electrical engineering; and
- Road transport (vehicle operations).

For further information refer to <https://www.tec.govt.nz/fees-free-information-for-teos/eligibility-criteria-and-fees-free-coverage/>

## Apprenticeship Support Programme

The Apprenticeship Support Programme is delivered from a number of government agencies and includes:

- the new Apprenticeship Boost, which will help employers pay for new and existing apprentices in their first two years of training
- an expansion to MSD's Mana in Mahi programme to help people into long-term work and gain a formal industry training qualification
- support for seven existing Group Training Schemes to help them continue to employ some 1,700 apprentices and trainees
- the new Regional Apprenticeships Initiative, funded through the Provincial Growth Fund, which will support employers in the regions to take up new apprentices.

Apprenticeship Boost aims to provide support for employers to retain and take on new apprentices as the economy recovers from the impacts of COVID-19, so they can continue to earn and progress towards their qualifications.

This initiative recognises apprentices need more support from employers in their first two years while they are training and developing their skills.

Employers of first and second year apprentices who are in a Tertiary Education Commission approved New Zealand Apprenticeship or a Managed Apprenticeship will be able to apply for Apprenticeship Boost through the Ministry of Social Development (MSD).

Employers can apply for Apprenticeship Boost whether an apprentice has just started their training programme or is nearing the end of their first two years - right up until the apprentice has completed 24 months of their training programme (while the initiative is running).

Apprenticeship Boost will be available from 5 August 2020 and runs for 20 months.

Employers with an apprentice who is in their first year of their apprenticeship will be eligible for \$1,000 per month, and employers with an apprentice in their second year will be eligible for \$500 per month for a maximum period of 20 months.

**Mana in Mahi** was launched in August 2018 and aims to help people who are disadvantaged in the labour market move into long-term work and gain a formal industry qualification.

The programme includes a wage subsidy for employers, funding for pre-employment training, ongoing access to pastoral care and incentive payments for participants.

**Group Training Schemes** are existing industry-based training programmes which employ apprentices and trainees and provide related services to host employers.

**A new regional apprenticeship scheme** which will provide funding for regional employers to support them to take on new apprenticeships. The scheme will initially focus on displaced workers, and Māori and Pacific Peoples.

For further information refer to <https://www.workandincome.govt.nz/work/apprentice-support/index.html#null>

The Ministry of Social Development will be opening 36 **regional employment centers** across the country with four being established in the Otago and Southland regions, based in Oamaru, Dunedin, Queenstown and Invercargill.

### Mana in Mahi:

**Purpose:** To support employers investing in skills for their business, while also proactively helping those who need additional support to gain long-term sustainable work and earn a recognised industry qualification.

**Length of support:** Up to 24 months from 5 August 2020. Support available is dependent on a participant's training pathway.

**Job requirements:** Permanent full-time or part-time roles only. The job must pay at least the minimum wage.

**Aimed at:** People of all ages who need additional support to gain and maintain employment, including those who are disadvantaged in the labour market and at risk of long-term benefit dependency.

**Training pathway:** Agree to a training pathway by the end of month three that includes a formal industry training qualification on the NZQF. For some participants this may include starting in a pre-apprenticeship qualification (such as NZQF level 2 or 3 qualification) and working towards an apprenticeship or NZQF level 4 qualification where appropriate.

**Wage subsidy to employers:** Up to \$16,000 for the first year and up to \$8,000 for the second year (while the participant remains in training).

- Paid via monthly instalments (applies to all new first and second year contracts from August 2020).
- Existing Mana in Mahi employers will continue to receive any wage subsidy payments as per their agreed payment schedule.
- Amounts are GST exclusive. GST will be added to payments where the employer is GST-registered.

**Incentive payments for participant:** Up to \$3,000 in the first year and up to \$3,000 in the second year (dependent on a participant remaining on a training pathway).

**Additional financial support:** Up to \$8,000 each year towards industry training course fees (where not covered under Fees Free or the Targeted Training and Apprenticeship Fund schemes), up to a maximum of \$16,000 over 24 months.

- Up to \$2,000 pre-employment training.
- Up to \$2,000 in each of the two years to help with any additional educational supports (such as help with literacy and numeracy tuition) or help with a work from home set up.

#### **Pastoral Care Support:**

- Free coaching and mentoring services for participants for up to 24 months.
- Support for employers through [Te Heke Mai](#) and In-Work Support for up to 24 months.

#### **Apprenticeship Boost**

##### **Purpose:**

To support employers who have employees in the first two years of a TEC-approved NZ Apprenticeship or Managed Apprenticeship. They need to be employed and in training. It can also be used to hire new apprentices.

##### **Length of support:**

Available from 5 August 2020 until April 2022, for up to 20 months from commencement.

##### **Job requirements:**

Available to new and existing apprentices who are in the first two years of a TEC-approved NZ Apprenticeship or Managed Apprenticeship.

##### **Aimed at:**

People of all ages actively training towards an approved apprenticeship.

**Training pathway:**

Enrolled in a TEC-approved NZ Apprenticeship or Managed Apprenticeship (new or existing) that leads to a level 4 NZ qualification of at least 120 credits.

**Wage subsidy to employers:**

Up to \$12,000 (\$1,000 per month) in the first year of the employee's apprenticeship and up to \$6,000 (\$500 per month) for the second year of the employee's apprenticeship. The different amounts available to first and second year apprentices acknowledge that an apprentice in their first year of training may require more support in the workplace and this is why a larger amount can be paid.

Amounts are GST exclusive. GST will be added to payments where the employer is GST-registered.

**Ministry for Social Development (MSD) Employment Zones**

MSD has launched **Employment Zones** with sites in the Southern region located in Timaru, Dunedin, Invercargill and Queenstown. They offer a space for employers, jobseekers and other partner agencies to meet and access the services MSD have to offer. They are staffed by members of the employment team who are available to answer any queries and make connections for people using the centre to the range of employment, education and training opportunities available.

**Employers**

- A place to meet with jobseekers and discuss current vacancies and upcoming opportunities within their business / industry
- A space to conduct interviews (in person or virtually)
- Connect with employment team to discuss upcoming opportunities and understand range of products and services available to them to support recruitment needs

**Clients**

- A place to meet with employment team to discuss current and upcoming opportunities, and identify support available to them
- Access to kiosks and other tools to assist with job search
- Opportunities to meet with employers who are recruiting and a space to complete interviews
- Access to WiFi, for example, to participate in virtual job expos if they don't have internet access

**Partners and Stakeholders**

- A place to connect with and promote their services and initiatives to employers and job seekers
- A place to display information, such as redeployment opportunities through other agencies
- Space to run training and workshops.

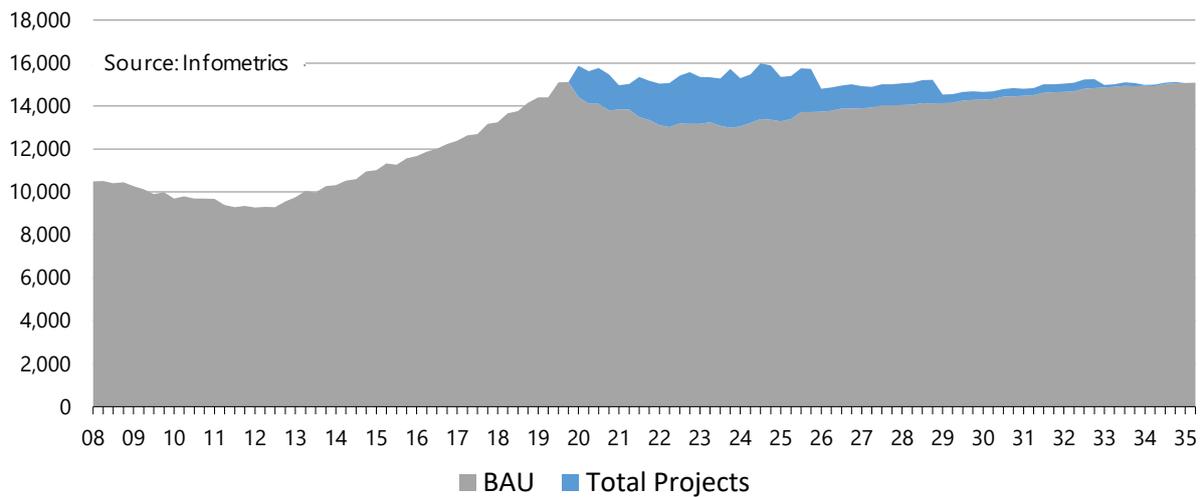
# Supply of and demand for labour

## Demand for labour

In the project based model the volume of major construction projects on the books in the Otago Region over the next few years drives additional demand for. Between 2020 and the end of 2025, the forecast projects would be expected to boost demand for workers in the construction industry in Otago by between 1,500 and 2,500 at any point in time. This project demand balances out the drop in business-as-usual employment. Reducing the number of new people required in the industry from a high of 2,500 in 2019 to an average of 1,000 per annum in the period 2020 – 2029.

**Graph 5**

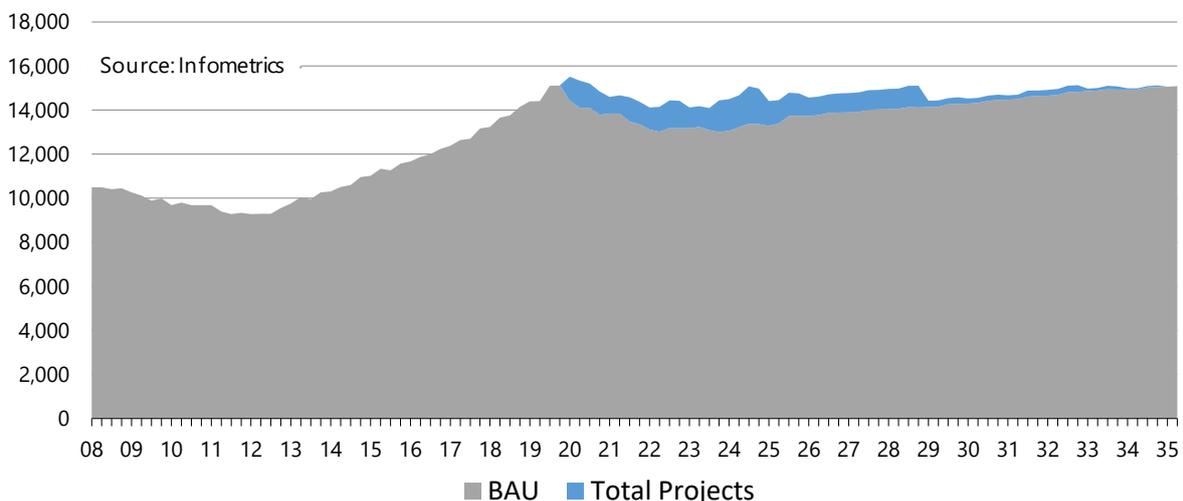
Projected construction employment in Otago Region - Project based forecast



In the contracted model the volume of major construction projects is reduced (particularly within the Inland Otago Region) with an associated reduction in labour. Between 2020 and the end of 2025, the remaining major projects are expected to need between 750 and 1,650 at any point in time which is insufficient to address the drop in business-as-usual employment under this scenario. Coastal project numbers, with retirement becoming the largest driver of employment demand reducing the number of new people required (supply Vs Demand gap) in the industry from a high of 2,500 in 2019 to a forecast surplus in 2021, though replacement staff will still need to be found.

**Graph 6**

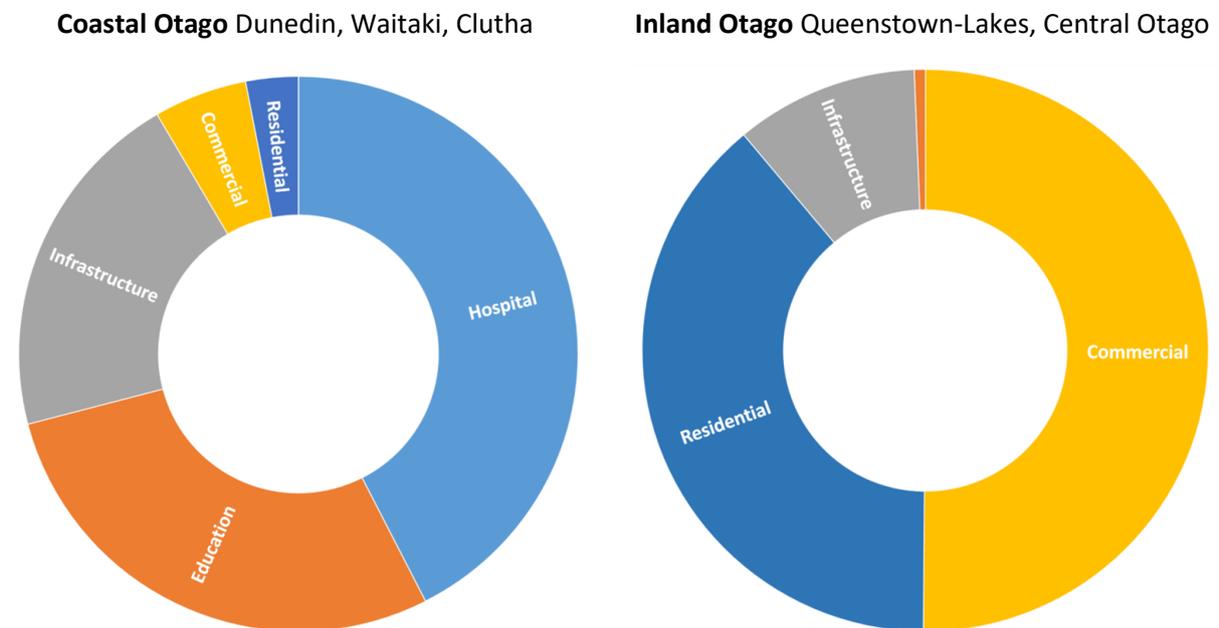
Projected construction employment in Otago based on a contracted project scenario



The nature of work is significantly different between inland and coastal Otago. Coastal Otago is largely publicly funded with approximately 35% linked to the new Dunedin Hospital, 35% linked to Education projects (particularly Otago University) and 20% Infrastructure, with the balance being Commercial and Residential projects. Inland Otago is almost the opposite with 50% Commercial, 30% Residential, 17.5% Infrastructure and the balance made up of Education projects.

**Graph 7.**

Project composition comparison between Inland and Coastal Otago

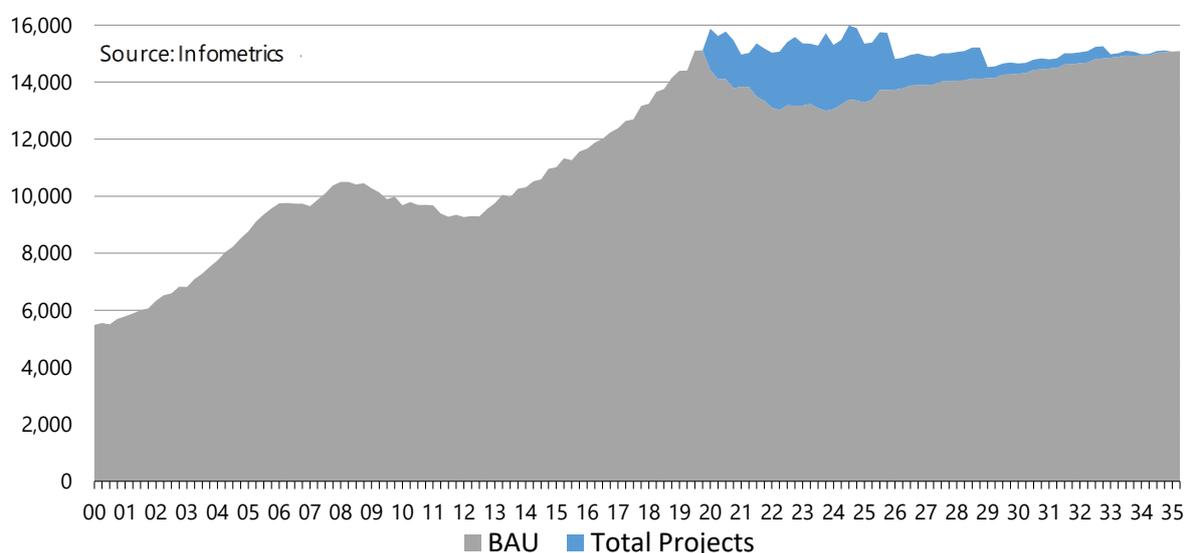


Under BAU conditions, construction activity, and associated demand for construction employment, in Dunedin is expected to gradually trend upwards throughout the forecast period. The lack of any significant cyclical downturn in this profile means the additional activity that is captured in our major project list will clearly add to demand for construction workers in the city. The lumpy demand profile for workers is likely to be most pronounced in 2023/24, when work on both the major buildings at Dunedin Hospital is expected to be in full swing.

While there is a reduction in project activity in 2025 and again in 2029 (see graph 8) this is more reflective of the lack of forecast data more than five years out rather than an actual forecast drop.

**Graph 8.**

Projected construction employment in Coastal Otago

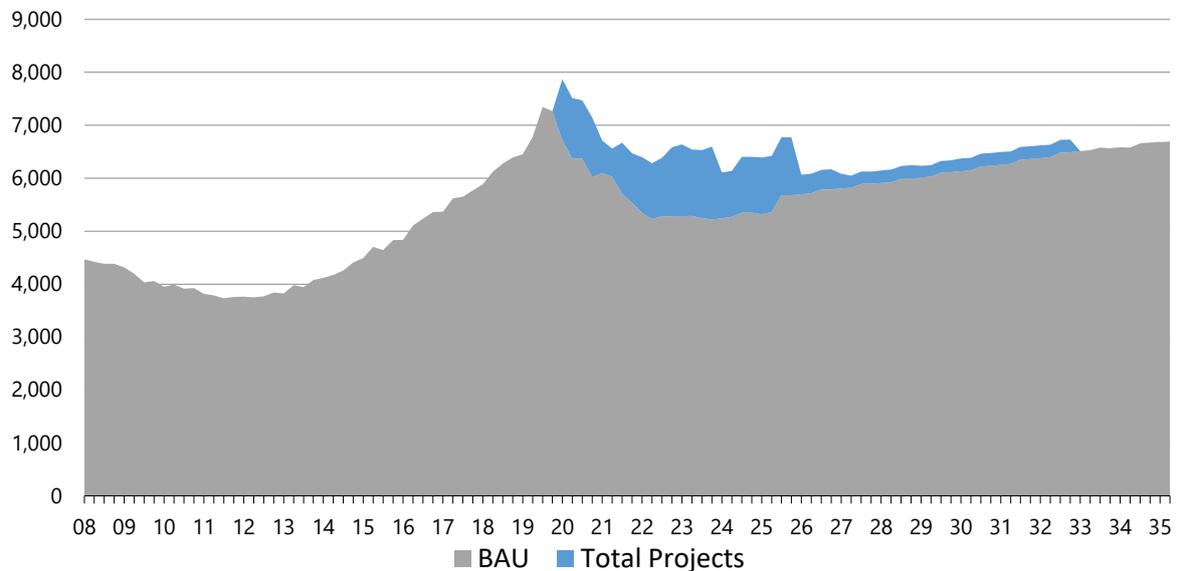


The project based forecast (see Graph 9) is based on the construction projects valued at twenty million dollars and above identified in primary research during the project in 2019 and verified by Pacifecon Ltd in July 2020.

As at the beginning of July there had been very few projects formally put on hold or cancelled so while the economic based BAU forecast shows a significant drop in 2020 the project based spike in employment still exists.

**Graph 9.**

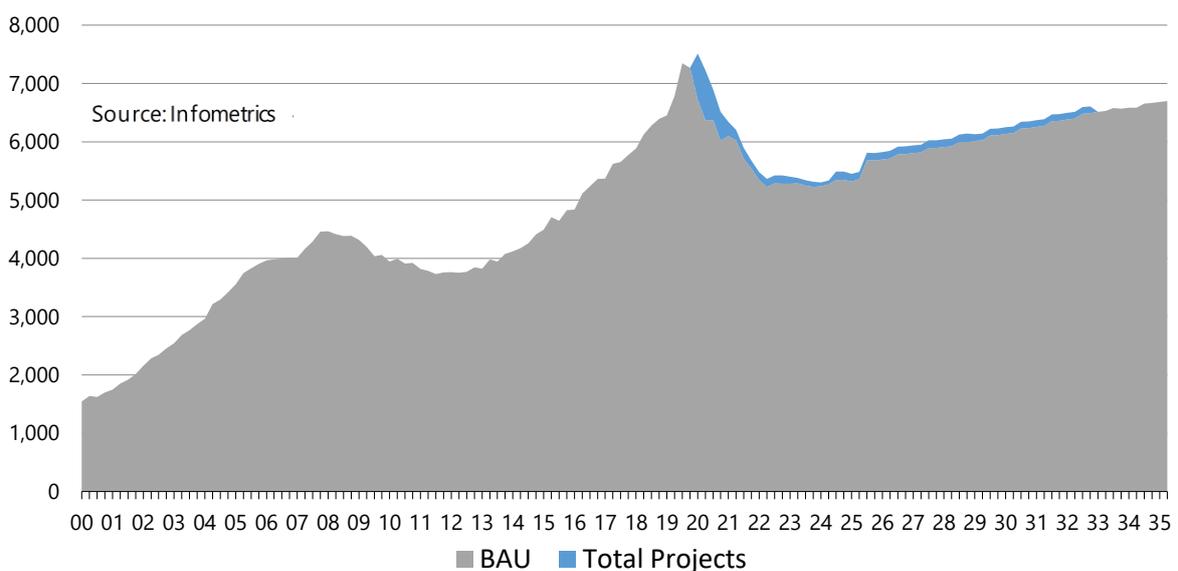
Projected construction employment in Inland Otago - Project based forecast



The contracted project scenario (see graph 10) applies an alternative logic to the project list proposing that all privately funded projects that have not started in Inland Otago will not proceed, while projects already underway will continue through to completion. Under this scenario a significant drop in employment demand is forecast between 2021 and 2025.

**Graph 10.**

Projected construction employment in Inland Otago - Contracted project scenario



It should be noted that the reality will probably fall somewhere between the two models (shown in Graphs 9 and 10) and two revisions of this forecast scheduled to take place in September and November 2020 will update the graphs and should show an emerging trend.

## Supply of Labour

The biggest issues facing the supply and demand for labour in the Otago Region over the next 10 years are:

- Right time;
- Right place;
- Right skills.

**Right time** - Inland Otago could see an oversupply of skilled labour if the future aligns more closely with the contracted project view but the demand from the New Dunedin Hospital does not increase significantly until 2023 or later. (see graph 10)

**Right place** - Regional events such as the current loss of hospitality and tourism jobs in Inland Otago of forecast closure of the Rio Tinto Aluminium Smelter at Tiwai Point are also likely to have more immediate impacts on their local communities with increased employment in the Construction Industry not featuring strongly until 2023 and beyond (See Graph 13).

**Right skills** – The opportunity offered by *shovel ready* civil infrastructure projects in the inland region could be seen as an alternative employment partway which could be either permanent or until vertical construction projects get under way. While there are some core skills shared across the construction sector many of the new roles created will require different skill sets.

Helping people ‘pivot’ during the negative gap between supply and demand is a focus of the next steps section. The potential loss of skilled and upskilling people from the wider construction workforce in the Otago Region is a significant risk. The regions need to retain and maintain a robust construction workforce to help build Otago out of the forecast post COVID-19 decline.

Regardless of construction activity, the ageing construction workforce and the need to replace people retiring or leaving the industry means there will continue to be a demand for construction workers in Otago over the next 15 years. To better understand where this human resource will come from we need to understand more about the supply of construction workers into the region. This in turn, will help us to address the gap between supply and demand in the future (see Graph 12).

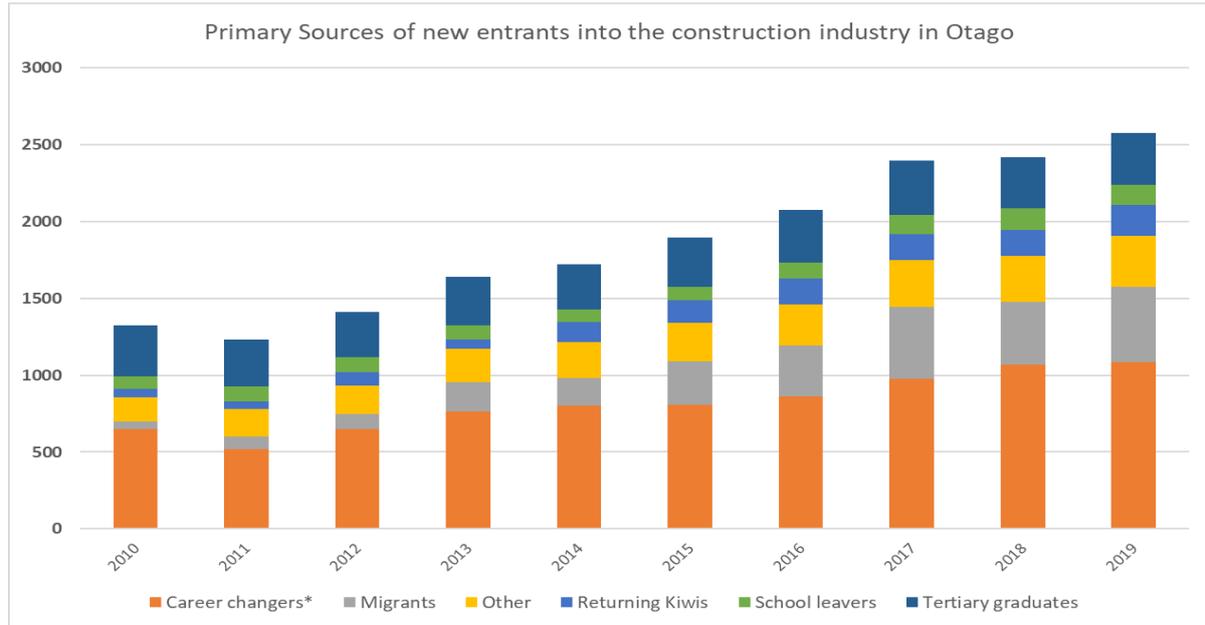
There have been seven significant labour supply channels for the Otago construction sector (see Graph 11). In order of their contribution to construction labour demand in Otago in 2018 these are:

1. Career changers (50%);
2. Migrants (15%);
3. Tertiary enrolments (10%);
4. New Zealanders returning from a prolonged time overseas (6%);
5. Secondary school leavers (5.5%);
6. Beneficiaries (2.2%);
7. Other (11%) including Corrections and people with incomplete data from the categories above.

Career changers have contributed more than 50% of new workers in each year since 2011. They will be a critical component of future workforce planning as people pivot between careers in order to stay in the region. The second largest and recently increasing supply channel has been migrant labour, changes to work visa requirements changed on 27 July 2020, (particularly for low skilled people earning less than the median New Zealand wage of \$25.50 per hour). This cohort now need to apply for a work visa every six months and can only stay for a maximum of 36 months before they have to leave New Zealand for a mandatory stand down period of 12 months.

Graph 11.

### Supply Side Gap with Sources of Workers



### Comparison of construction labour supply and demand

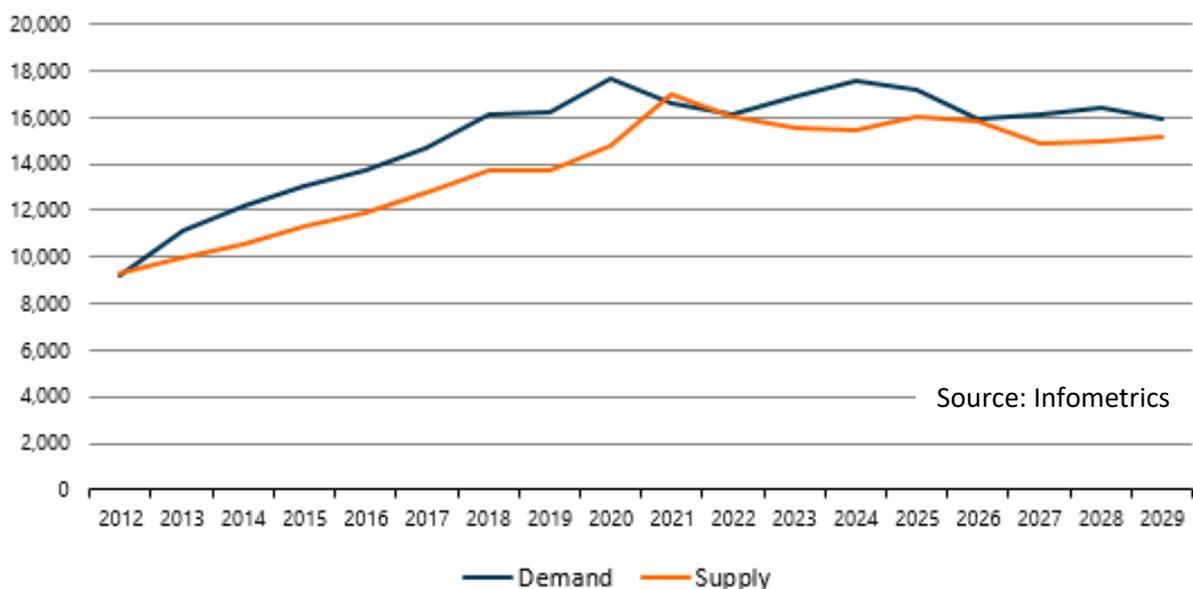
The construction sector needs to find workers for two reasons – to allow for increased demand and also to replace workers who leave the region or the sector. Graph 12 quantifies the gap between demand for and supply of labour. The gap represents the number of workers needed annually both historically and in the future.

The number of people needed in the construction industry in Otago fluctuates between 16,000 and 18,000 people between 2019 and 2025. While demand may be expected to increase if the more optimistic projection is achieved, even the more pessimistic economic forecast still has the sector requiring nearly 1,200 people per year over the next five years 2020 to 2024 to fill new or replacement roles across the Otago region.

While supply and demand seem to drop on from 2025 onwards this is more of a forecasting horizon rather than an actual drop in forecast demand. It is therefore important to continue to increase the supply of construction workers to be able to put in place all of the planned projects.

Graph 12.

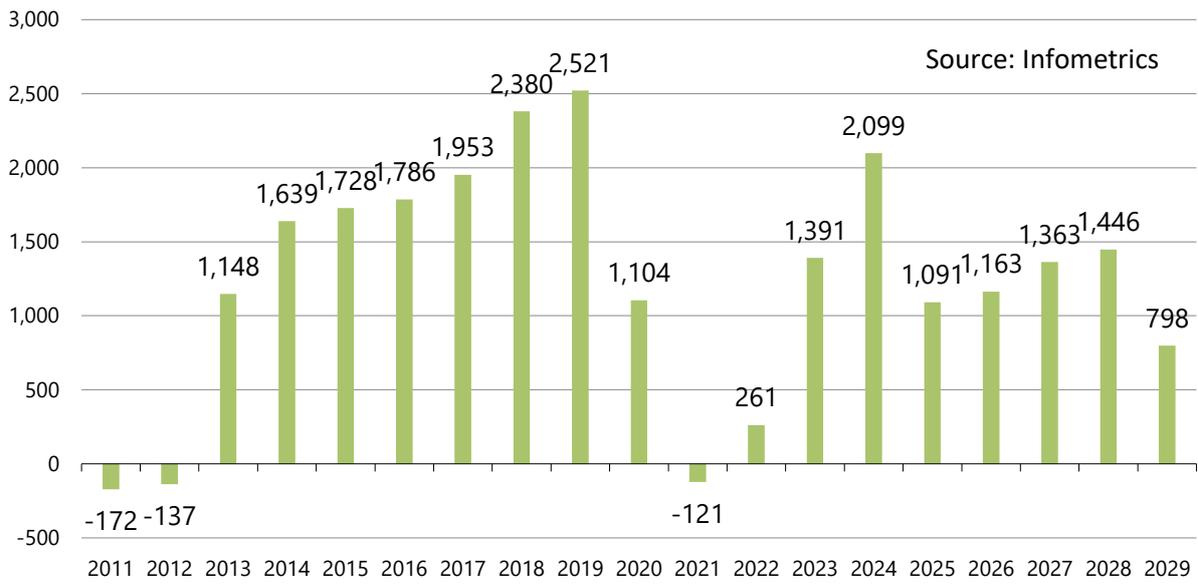
### Supply and demand of Construction workers in Otago



Source: Infometrics

**Graph 13.**

**Projected employment gap in Otago Region**



## Recommendations for next steps

The coming months and years will be critical to the retention, maintenance, recruitment and upskilling of the Construction workforce needed to meet the level of work planned in Otago. Therefore, it is important that there is a plan for progressing actions identified through this project. Our recommendations for next steps are to:

1. Establish and maintain a regional group with a focus on construction workforce needs;
2. Build on the connections made through this project to put in place a network of anyone interested or invested in construction employment and training in the region;
3. Identify a short list of lower cost projects and put in place those that will have short term impact on meeting construction workforce demand, retaining capacity and pivoting staff and put these in place;
4. Scope and seek funding for a short list of bigger projects that will have short term impacts and longer-term returns to help the region meet its construction workforce demands;
5. Undertake further research or investigation about the construction workforce in Otago.

### Regional Construction workforce group

One of the strengths of this project is that it was undertaken with people from across Otago with an interest in the Construction workforce and a real drive to facilitate change. Having people from all local councils along with central government, industry and iwi has given unique insights into what is happening at a local level.

Central Government is increasingly looking at ways that regions can take ownership of skill and workforce needs. The group in Otago is ahead of the game in this regard, and seen as a model for effective engagement. Moving forward, it has the potential to put in place change projects that go beyond what any one organisation could achieve on its own. This could be strengthened further by adding employers and workers - or their representatives, to the group.

[Example: the Regional Skills Leadership Group \(RSLG\) will have a focus on all sectors in the region. Having a construction workforce group, which can help inform the RSLG on construction specific matters, would be incredibly valuable and help drive projects with immediate impact.](#)

### Creating a regional network

The most common theme during this project was connectivity. Employers, government officials, and other stakeholders identified the need for greater connections between people, businesses, agencies and social partners. One of the benefits of this project was that it built on existing connections and started to put in place networks of people with an interest in the Construction workforce. We were struck by the willingness of employers to share what they know and indicate their willingness to work collaboratively to build the sector.

Building on these connections and good will would have a positive impact on the sector overall and give the best chance for initiatives to be successful. In practice, this could involve creating regular communications, hosting functions or 'get togethers', or using the network to gain insights and trial initiatives.

### Put in place projects with immediate impact

Some of the solutions identified in the main project document are relatively low cost and would have benefits that could be seen in the short term. Identifying and choosing some of these to put in place would both address construction workforce demand and serve as a springboard for larger projects. These projects would create visibility about the construction workforce and the work being done by a range of agencies to meet workforce demands.

[Example: Identifying 'lifeboat' jobs which allow people to pivot their skill set into another sector for a period of time. Motivated individuals could be retained in the region during periods of low construction activity without losing them from the workforce resulting in a skills and labour gap when the sector bounces back.](#)

### Scope and seek funding and buy in for bigger projects

Other solutions identified through this project are much larger in scale and can only really be successful with adequate funding and buy-in from a range of stakeholders. The proposed regional construction workforce group could scope and shortlist these projects with the aim of securing funding and buy-in for the ones identified as having the highest impact.

Example: A large scale Group Employment Scheme where a central organisation employs individuals who are then 'contracted' out to horizontal or vertical construction companies. This model would provide continuity of employment and training to assist individuals to 'pivot' between sectors and regions.

### Undertake further research or investigation

During the course of the project, several areas of further research or investigation were identified that would provide insights into the construction sector on an ongoing basis. Some of these projects are short, stand-alone pieces of work while others are more focused on collecting and recording information. Progressing these projects would have value for employers and in the future would make it easier to measure the success of initiatives put in place following this project.

1. Better data at a detailed geographical level plus more consistent definitions of regions
2. More information about immigration – detailed levels, flows and post COVID-19 numbers
3. Research about the impact of immigration on the labour market and economy
4. Research on the mobility of construction workers – who moves, how often, where, permanent or short-term, etc.
5. More detailed training data such as coastal vs inland, infrastructure vs residential & commercial
6. Collect and disseminate information about construction workforce supply and demand on a regular basis.

### Contact details for primary research and data sources



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