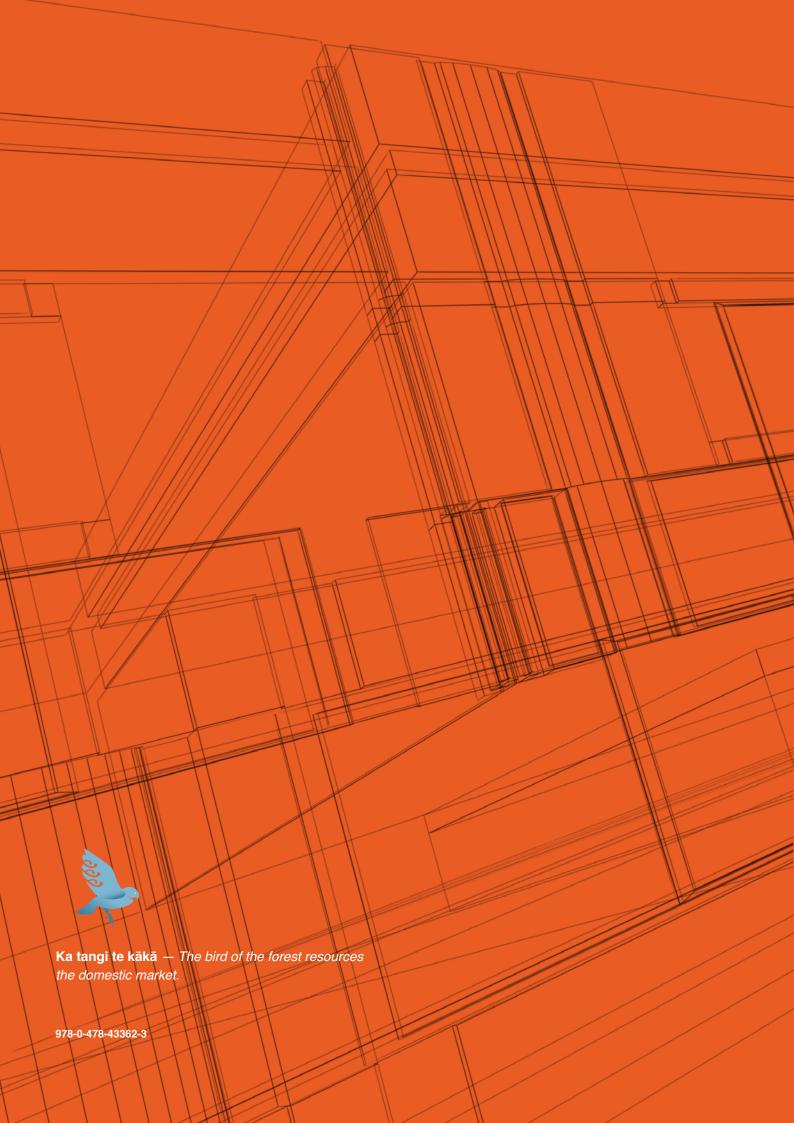


## Māori in the Construction Sector

A report for the Māori Economic Development Advisory

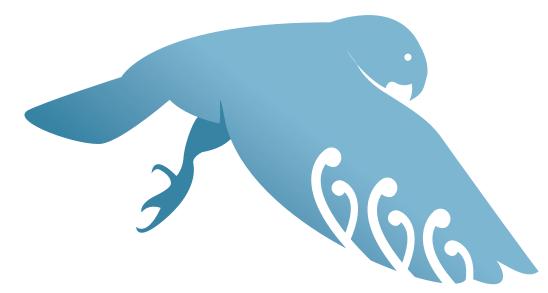
Board by the Ministry of Business, Innovation and

Employment









# **Building a Future**

### **Māori in the Construction Sector**

A report for the Māori Economic Development Advisory Board by the Ministry of Business, Innovation and Employment



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### **Mihimihi**

This report on Māori in the construction sector is the first of a series on Māori participation in industry sectors and regions that are being completed for the Māori Economic Development Advisory Board by the Ministry of Business, Innovation and Employment. The Board is responsible for the stewardship of He kai kei aku ringa, the Crown-Māori Growth Partnership.

The reports will fill a gap in our knowledge of Māori participation in key sectors and regions. While we have general information on Māori labour market participation and business development we know very little about the detail of Māori employment in specific sectors or the businesses that are owned and managed by Māori in those sectors. Available information on regional economies is more detailed but much work remains to be done.

A key role of the Advisory Board is to monitor and evaluate the policies and programmes developed and implemented by public sector agencies that have an impact on Māori economic development. The sector and regional reports will allow the Advisory Board to be more effective in this role by providing more detailed and timely information.

The construction sector was chosen as the subject of the first report because it is an industry in which many Māori participate. It is also growing and is currently providing more opportunities for skill development and higher incomes than other sectors.

It is clear from the report that many Māori are taking the opportunities the sector provides and are developing skills through Industry Training Organisation programmes and apprenticeships that will allow them to make progress as workers, managers and business owners in the construction industry.

The report suggests disparities between Māori and others in the industry are partly a reflection of Māori entering the sector (and training opportunities) at a lower level than other participants and partly a lower completion rate by Māori of the training opportunities available in the industry.

The report also notes that training approaches that understand the needs of Māori trainees have a better completion rate than others. Fortunately, there are a number of courses demonstrating how completion rates can rise when they are structured properly. The report also shows the clear medium and longer-term benefits of skill development through training courses.

These opportunities are very important because the construction sector has low barriers to entry and many Māori with no qualifications can gain a foothold in the labour market through work in the sector – one in five of all Māori employed in the sector is employed as a labourer compared with one in every 10 for non-Māori. Once employed in the sector, it can provide an effective pathway to better skill development and higher incomes – half of all Māori in the sector hold skilled positions as managers, professionals, technicians and trade workers.





The impact of the higher skilled in the construction sector workforce is reflected in incomes, with the median income for Māori in the sector \$3,600 higher than for Māori in employment generally. This is also true for the 4000 self-employed in the sector – almost one in five of all Māori in construction - with Māori sole traders earning an annual median wage that is a \$1000 more than the median wage for employees.

The Building and Construction Industry Training Organisation estimates that a further 3000 apprentices above the current 9000 being trained are needed to meet short-term demand in the construction sector. As a result of this report, the Advisory Board will be looking at how Māori can help to meet this demand for apprentices and also help fill the increased demand for skilled workers and professionals at all levels of the industry.

### Ngahiwi Tomoana

Chair

Māori Economic Development Advisory Board







### The Construction Sector Landscape

### Private Training Establishments and Technical Colleges

Provide training in pre-trades and other basic vocational training



### **On-Job Training**

Ranges from
Apprenticeships to remedial
literacy courses. Is a
common pathway to moving
into more skilled positions



#### Universities

Training for higher skilled construction occupations

These occupations comprise a small segment of the workforce



#### Labourers

Do a variety of manual tasks on roadways and building sites, including clearing, digging and levelling land, and concreting.

#### Bricklayers, Painters, and other tradespersons

There is a current demand for people with these skills. Some go through apprenticeships.

### Carpenters and Joiners

Work on-site constructing large and small buildings, and repairing and installing structures. Many are self employed and been through an apprenticeship.

### Architects and Engineers

Architects design buildings and oversee and provide advice on their construction. Civil engineers plan and draw the technical details.

#### Construction Project Managers

Oversee sites and projects. Many come up through ranks, others study towards a management qualification.











## Small firms and Sole Traders

- » Employ over half of the workforce
- » Predominantly in residential building and construction services.





### Mid-size Firms

- Employ a quarter of the workforce »
- » Predominantly in residential building and construction services

### Large Firms

Employ a quarter of the workforce

Often specialised in the construction of infrastructure such as dams and roads





# The construction sector is the fifth largest sector in the New Zealand economy

The construction sector is the fifth largest sector in the New Zealand economy, generating 6 percent of GDP. It is highly diverse covering a wide range of activities. Given this diversity, it can be useful to think of the industry in terms of subsectors and the types of activity carried out in each. The three subsectors within the construction industry are:

- » Residential and non-residential building. This mainly consists of self-employed builders or small building firms, typically building two or three houses per year as well as a range of alteration and repair work. Non-residential building firms tend to be larger because they work on larger projects such as offices and industrial buildings.
- » Heavy and civil engineering. This is the smallest sub-sector but due to its specialisation in large infrastructure projects such as dams, roads, tunnels and electricity and telecommunication networks, most people work in the 35 large companies – which include some of New Zealand's largest firms.
- » Construction services. This is the largest sub-sector, and includes occupations such as electricians, joiners, plumbers, plasterers and concreters.

Over 170,000 people work in the sector. These people account for 8 percent of the New Zealand workforce. The number employed in the sector has continued to grow despite the global financial crisis. The workforce covers

a wide range of skills and levels from labourers and tradespeople to project managers and engineers.

The construction sector is a significant employer of Māori. With over 19,000 Māori working in the sector, construction is the fourth largest employer of Māori following manufacturing, health care and social service, and education and training. Roughly one in five Māori who are self-employed work in the construction sector.

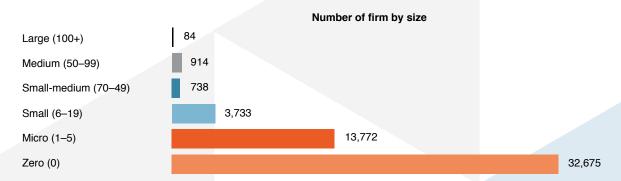
There is an important challenge in that while we know quite a lot about the construction sector as a whole in New Zealand but we know much less about Māori firms within the sector. We have no method at the moment of identifying them, and it may well be the case that Māori firms are different from the firms across the sector. This is a gap that should be addressed in order to get an accurate picture of Māori firms in the sector.

### The sector is dominated by a large number of very small firms

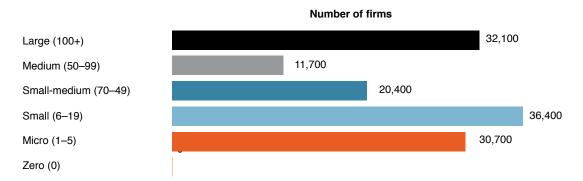
The sector is dominated by a large number of very small firms, with sole traders the most common structure.

Eighty seven percent of all firms in the sector employ nine or fewer workers. Less than two percent of firms in the sector employ more than 50 people. However, these large firms employ forty percent of the workforce.

#### Sole traders are the most common firm size



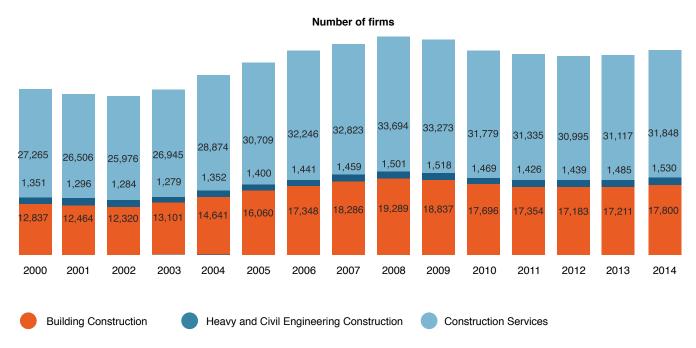
### Small and very large firms employ the bulk of workers in the sector



Source: Business Demography Statistics, Statistics NZ

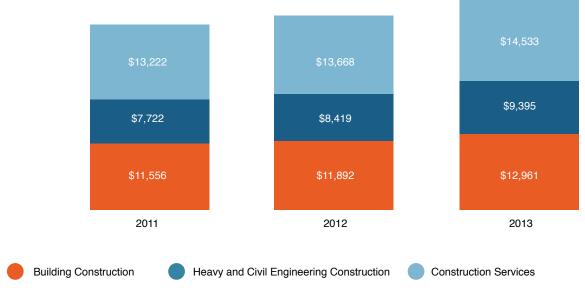
Within the sector there is no clear relationship between firm size and productivity. That said, smaller firms tend to use their assets inefficiently and invest less. Large firms in the sector tend to use their assets efficiently, have less leverage, but have lower profit margins. Growth in the number of firms has been driven by the establishment of firms in construction services and residential building. This growth in firms has also seen an attendant rise in employment, particularly in the area of construction services which has taken on

### Growth in the number of firms is in construction services and building construction



Source: New Zealand Business Demography Statistics 2013, Statistics NZ

### Construction sector revenues are rising NZ\$m Nominal



Source: Annual Enterprise Survey, Statistics NZ

an additional 18,000 employees since 2002. A large proportion of this growth was in the Canterbury region.

Profit margins in heavy and civil engineering and construction services are relatively higher than in the rest of the sector. In particular, carpentry, painting and decorating, plastering and ceiling, structural steel erection, bricklaying, and tiling and carpeting stand out as very high profit margin businesses.

Patterns of firm distribution and concentration vary across subsectors. Civil and heavy engineering firms are concentrated in the large metro areas as well as Waikato, Manawatu-Wanganui and Bay of Plenty. By contrast, residential building is fragmented and competitive across most regions in the country. Construction Services is spread across the country.

The sector is quite volatile, experiencing the highs and lows of the business cycle more acutely than the economy as a whole. In times of high demand, there are bottlenecks with the supply of trained and skilled labour, with overseas workers often filling the gaps. The industry is currently expressing concerns over how it will meet demand over the next few years to cover the Canterbury

rebuild, demand in Auckland and weather-tightness remedial work.

Low skill levels are identified as a constraint on the sector's productivity. Some of this may be a result of firms being discouraged from taking people on and investing in them due to the tradition of ups and downs in demand. However, larger firms have invested in improving the skills of their workforce – especially in numeracy and literacy. Management capacity in small firms is also an area of concern.



# Skills, Education & Training for Māori

Low levels of literacy and numeracy are an issue across the industry. This not only affects low skilled individuals, but also has consequences for firms in the industry. While many rangatahi leave school with National Certificate of Educational Achievement (NCEA) level 2, a high proportion of Māori leave school without qualifications or the literacy and numeracy skills necessary to be successful in the sector. Without these skills, there is

limited opportunity to advance from being a labourer into the trades and other higher skilled occupations.

There are a number of training and education opportunities available to upskill oneself into higher skilled occupations in the construction sector or other industries. Yet there is a challenge for rangatahi in choosing how to chart a course from training into a construction career.

### Māori and Pasifika Trades Training

Pre-trades delivered in partnership with industry

### On - job training

Delivered through ITOs at a multitude of levels from literacy to supervisory training

### **Apprenticeships**

Pathways to qualification in trades



### **Secondary Schooling**

A range from pretrades training to university level qualifications

### **Tertiary Training**

A range from pre-trades training to university level qualifications

### **Trades Academies**

Vocational Training for secondary students

# Forging career pathways is not easy and options are unclear

Planning a path from school to working in construction is not easy, as the options are often unclear. This challenge is not limited to the construction sector. Programmes such as Gateways are making headway into clarifying career paths for Rangatahi. However, little is known about how students find and use available information on career options.

Anecdotally, it is suggested that many labourers just find themselves in construction, rather than having chosen a career. This is supported by the fact that relatively high levels of workers in the sector have less than school level qualifications, and ongoing issues around numeracy and literacy. As such, further research is necessary to establish whether this is the case and if so, what may be behind it.

Once in the industry, pathways to career advancement can also be unclear. Research conducted by the NZ Productivity Commission noted that "few people progress beyond owner operator status." This has been an area of focus for the industry and has been identified by the Building and Construction Sector Productivity Partnership as an important barrier to attracting and retaining people in the industry.

What is clear is that although the sector does provide employment opportunities for those with low and no skills, basic skills such as literacy and numeracy are becoming increasingly important. Opportunities for advancement, whether through gaining trades qualifications or effective self-employment and small business management, depend on higher levels of education and skills that are often lacking, particularly for Māori.

# But there are available foundation and secondary training and education pathways for Māori

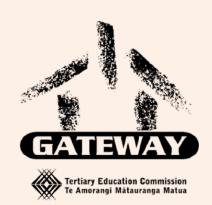
Across the country, Māori are leaving secondary education with lower levels of qualification than are non-Māori. Yet the potential for higher levels of achievement is evident. The level of Māori achievement has grown alongside the national level of achievement for non-Māori but in most regions it is at a lower level overall.

In particular, Auckland, Waikato, Gisborne and Manawatu-Wanganui regions have had, on average ,lower levels of Māori achievement of literacy and numeracy standards. In these regions, more than 40 percent of Māori leavers have not achieved NCEA level 2.

Gateway is a programme that enables schools to provide senior students (year 11 to year 13+) with opportunities to access structured workplace learning that has:

- » a formalised learning arrangement set in the workplace
- » specified knowledge and skills that a student will attain
- » specified assessment methods (workplace learning).

The Tertiary Education Commission provides Gateway funding to meet the costs that a state secondary school or state integrated secondary school incurs in arranging and managing workplace learning, including assessment.



#### Māori National Certificate of Educational Achievement (NCEA) Level 2 Leavers 2011-2013

Region	2011		2012		2013	
	Number of Leavers	Percentage leaving with NCEA Level 2	Number of Leavers	Percentage leaving with NCEA Level 2	Number of Leavers	Percentage leaving with NCEA Level 2
Tai Tokerau	966	55%	1,019	57%	980	57%
Auckland	2,891	54%	2,782	55%	2,897	56%
Waikato	1,470	49%	1,425	56%	1,581	56%
Bay of Plenty/Rotorua/Taupo	1,682	57%	1,658	58%	1,766	55%
Taranaki/Whanganui/Manawatu	1,028	57%	999	55%	953	62%
Hawke's Bay/Gisborne	1,167	56%	1,183	58%	1,188	63%
Wellington	1,301	60%	1,209	59%	1,309	62%
Nelson/Marlborough/West Coast	333	55%	283	61%	338	60%
Canterbury	774	55%	798	51%	828	53%
Otago Southland	453	53%	420	59%	459	62%
Total	12,065	55%	11,776	56%	12,299	58%

Source: Ministry of Education, Education Counts 2014

### **Youth Guarantee**

Youth Guarantee is a suite of programmes providing young people with more choices, ways and places to achieve NCEA Level 2 or equivalent qualifications. While these programmes are open to all young persons, Māori are a large proportion of those taking part.

#### **Fees Free**

One element of Youth Guarantee is Fees Free, a provision which enables young people who have left school to continue to study full time towards NCEA Level 2 in tertiary establishments. In 2014, there are 10,000 Fees Free places. This rises to 10,500 in 2015.

#### **Trades Academies**

Trades Academies enable senior secondary school students to access tertiary vocational education while remaining enrolled in school. They generally involve a mix of 3-4 days in school and 1-2 days in a tertiary setting. In 2014, 4,500 places are available in trades academies.

Currently there are 22 trades academies across the country. Around 280 secondary schools are now involved in the programme. Māori are well represented amongst these programmes accounting for 36 percent of enrolments in the last year.

Based on estimated distribution of places within each programme's 2014 Roll Plan, approximately 720 places were allocated to a specific construction or infrastructure programme.

#### **Vocational Pathways**

Another relatively new component of the Youth Guarantee programme is Vocational Pathways. Students in years 11 - 13, who are interested in a career in the trades or technology, can use the Vocational Pathways to identify and plan their study options and develop clear pathways to obtain vocational qualifications that are relevant in the workplace.

Through the pathways students are provided with a set of tools to identify the standards that they achieve and match their progress toward skillsets and credits identified as part of the sector. Provisional 2013 data, indicates that of the 35,000, or 42 percent, of students achieving NCEA Level 2 would have achieved at least one vocational pathway award. Of these 19 percent were in construction and infrastructure.

### And tertiary training options available too

There is a wide variety of options available for those pursuing tertiary training for construction careers. These range from pre-trades training to university level qualifications.

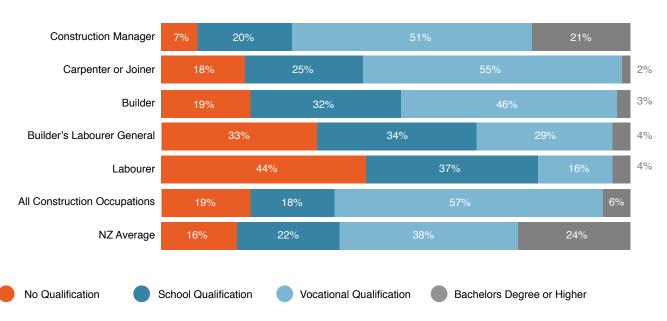
Over the last five years Māori learners have become an increasingly large proportion of the learners studying towards construction-relevant tertiary programmes. Three quarters of Māori learners studying towards construction relevant qualifications are enrolled at polytechs or institutes of technology. However, across all levels of qualification, Māori have lower completion rates than their counterparts.

Only a small number of people working in the sector have university level qualifications. Employers are, however, increasingly looking for entrants into management roles to have university level qualifications in relevant fields. Few Māori are studying towards degree level qualifications relevant to the construction sector such as civil engineering or architecture. Of students studying toward construction related degrees, Māori students comprise less than ten percent.

Vocational qualifications such as those gained through apprenticeships are amongst the most common forms of tertiary qualifications in the industry. The licensed building practitioners' scheme will grow the need for a level of qualification among tradespersons. Pre-Trades training can be an important stepping stone towards finding employment and entering apprenticeships or other training. Polytechnics and private training establishments provide pre trades training.

Qualifications are not a necessary requirement for careers in construction. Many people working across the industry do not possess school level qualifications. However, amongst higher skilled roles vocational or tertiary qualifications are increasingly expected. For some careers such as architecture and civil engineering a tertiary qualification is required.

#### Many working in the sector have low or no qualifications



Source: New Zealand Productivity Commission 2012

## On the job training and support is central to gaining skills in the construction sector

On job training is a central component of how workers in the construction industry develop skills and how employers grow their firm's skills base. Available types and delivery modes for training are highly varied ranging from short courses to full apprenticeships. In many cases this is delivered through Industry Training Organisations (ITOs) in partnership with employers.

Training provided through Industry Training Organisations (ITOs) is an important component of skills development in the construction sector.

Industry training provides training that is linked to the New Zealand Qualifications Framework, while enabling employers to grow their workforce for the future. Training is partly funded by the employers themselves and through government funding of the ITOs.

ITOs arrange the training, set the standards for qualifications, and work with industry to determine skill development needs. To undertake industry training a trainee must be in employment.

#### ...especially for Māori

ITO training can be an important means for moving into higher quality jobs. Māori are well represented within ITO training programmes, but are pursuing different qualifications with differing levels of completion than their peers.

Last year Māori learners accounted for 17 percent of ITO trainees. This is roughly equivalent to the proportion of Māori working in the sector as employees of firms (15 percent at the last census). This suggests that Māori learners are not underrepresented in enrolments to ITO programing and are not systematically facing barriers to accessing ITO training.

However, across all ITO training programmes Māori learners are younger and pursuing lower level qualifications than their peers. In many respects this reflects the demographic of Māori active in the sector. Prior to coming to an ITO, many Māori learners had few or no secondary school qualifications and it can

be assumed that many Māori learners are pursuing ITO courses at secondary school levels.

In part this suggests that Māori learners are coming into the construction sector, and into ITO training, underprepared and it is falling upon employers to develop a work ready workforce. Rather than using ITO training to build upon secondary schooling, some of this training may be regarded as remedial.

### Training outcomes are better when training is delivered in a kaupapa Māori approach

Within ITO training fewer Māori learners complete their courses than their peers. In part this may be explained through the delivery methods. Research has identified that Māori learners are better able to engage with programmes that are delivered kanohi ki te kanohi (face-to-face), are taught in group or team environments, and take a whanau centric approach. Programmes with higher Māori completion rates are distinguished by their approach. These programmes take a Kaupapa Māori approach to the structure and delivery of the programmes.

Intfratrain's Wahine Toa and Tama Toa training programmes are excellent examples of this approach in action. The Building and Construction Industry Training Organisation recognises the importance of whanau by offering Māori apprentices the opportunity to receive their certificate of completion on their home marae.

Importantly ITO training is strongly correlated to better work outcomes for Māori both in the short term and throughout their career. Research conducted by Infratrain confirmed that a majority of Māori received more challenging and rewarding work tasks as a direct result of participation in Infratrain programmes. Roughly half of trainees saw monetary benefits as a result of training.

### Infratrain's Māori Programming

Infratrain, the ITO for civil infrastructure, has recognised the need for and importance of supporting Māori in management roles by providing programming specifically targeted to Māori.

The ITO offers three programmes based on the National Certificate in Business, First line Management: Mana Whakatipu, in which participants earn a certificate in Leadership and Communication Level 3, and Wahine Toa and Tama Toa, in which participants earn a certificate in Project Management Level 4

Courses are taught in two multi-day modules.
Participants stay together on the New Zealand Army
National Marae in Waiouru Military Camp. Tikanga forms
an important part of the course both on marae and
through the use of whakatauki in the learning material.

Ninety per cent of the students on the programmes have very little regular contact with their marae or knowledge of their whakapapa.

Wahine Toa is a leadership course designed specifically for Māori women in junior to mid-management roles to help them advance their careers in the infrastructure industry.

The courses focus on equipping participants with management specific skills. These skills are critical to effective construction business. Skills such as project-management, confident decision-making, and building buy-in are critical to success as a manager. However, there is limited opportunity to develop these skills in submanagement roles in the sector.

Infratrain has places for 100 persons across the three programmes. These programmes are funded by the ITO in partnership with Te Puni Kōkiri.

# New Zealand Apprenticeships are a pathway to in demand skills

For people looking to begin a career in the construction industry, apprenticeship is an excellent way to develop the skills and gain the qualifications necessary to become practicing tradespersons.

NZ Apprenticeships provide an entry point into an occupation, setting a person up for a career in an industry, ensuring they meet any regulatory requirements for entry into an occupation, and contain a strong theoretical component to support further learning, as well as a practical element. There are no prerequisites to becoming an apprentice, but potential apprentices must find an employer who is willing to work with them throughout the process.

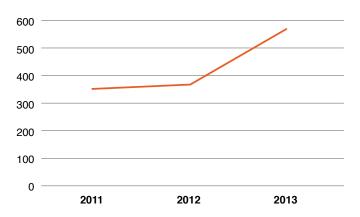
Apprentices learn through working on job sites alongside their employer and through the completion of theory-based course work either as night classes or through distance learning. They are also supported and assessed by training advisors from their ITO. Apprentices or their employer pay fees to the ITO, but they also earn a wage from their employer as they work toward certification in their chosen field. The vast majority of apprenticeships are in carpentry.

In January 2014, New Zealand Apprenticeships (NZ Apprenticeships) were introduced to provide a premier vocational pathway and quality support for all apprentices regardless of age. This replaces the modern apprenticeship scheme. The previous scheme was designed to cater to help young people aged 16–21.

The New Zealand Apprenticeships system requires that an apprentice must be employed in the occupation for which they are training throughout the apprenticeship, an apprentice must be supported by a training plan agreed by the apprentice, the employer and the organisation arranging the training, all NZ Apprenticeships will result in (at least) a level 4 New Zealand qualification. Apprenticeships generally last from 18 months to 4 years depending on the field.

Currently the demand for apprentices vastly outstrips the supply available to the industry. BCITO estimates that a further 3,000 apprentices over and above the current 9,000 in training are needed in the short term.

#### Māori enrollment in apprenticeships is rising



# Māori in apprenticeships have increased in number and as a proportion of all apprenticeship in NZ

In 2013, over 500 Māori trainees were enrolled through the modern apprenticeship programme. Māori trainees accounted for 15 percent of the trainees overall. The number of Māori enrolled in apprenticeships has increased both in absolute number and as a proportion of all apprenticeships since 2011. Over the last few years the number of apprentices across NZ has been growing steadily. Māori growth in apprenticeships has been growing at more than double the rate.

This can be attributed to the success of the apprenticeship reboot scheme. The scheme, which is part of the wider restructure of the system, has lifted participation in apprenticeships through the provision of grants towards the cost of tools and off-job course costs.

The majority of new Māori enrolments are in the Auckland and Canterbury regions. These regions host nearly half of Māori apprentices.

Manuwatu-Wanganui, Bay of Plenty and the Waikato regions have high concentrations of Māori trainees in ITO programmes, but have comparatively lower level of Māori participation in apprenticeship programmes suggesting that in these regions fewer Māori are moving into higher skilled roles.

### Māori and Pasifika Trades Training

The Māori and Pasifika Trades Training (MPTT) is a new delivery model that was introduced in early 2014 to increase the number of learners entering into and completing a Level 4 New Zealand Apprenticeship and improve employment outcomes for qualified trades training learners. This new delivery model is an expansion of two separate pilot programmes - the He Toki ki te Rika (Māori Trades Training) and the Pasifika Trades Training Initiative. Essentially, these two programmes have been brought together to establish a single programme designed to lift the participation and achievement of Māori and Pasifika young learners in order to gain skilled sustainable employment.

The target group of MPTT is Māori and Pasifika people aged 18 to 34. Eligible students are those that already have the necessary qualifications to enter level 4 on the New Zealand Qualifications Framework for apprenticeship training.

The MPTT is a joint initiative between Tertiary Education Commission (TEC) and Ministry of Business, Innovation and Employment (MBIE). Budget 2013 committed \$43 million over the four years to fund 8,700 places to 2017, although a learner may utilise multiple places depending on need. Funding also provides support for consortia operations and additional support to learners, including fee subsidies, tool grants and additional skills brokerage.

The MPTT initiative is based on the creation of consortia partnerships between tertiary providers, employers and Māori and Pasifika community groups as a new delivery mechanism.

The new delivery model includes:

- Forming consortium partnerships between iwi, hapu and Māori and Pasifika community groups, with employers and tertiary education organisations (including industry training organisations) to support participating learners
- Ensuring the consortium employers are involved from the beginning, from pre-screening the applicants through to selecting suitable training programmes to match applicants' needs
- » Offering fees-free places at tertiary providers, to enable learners to obtain qualifications that meet the pre-apprenticeship requirements of industries, and will result in offers of apprenticeship places by employers participating in the consortia
- Providing a grant to participants once they are in employment and training towards an apprenticeship to help with costs of tools
- Providing skills brokerage services to match participants with learning options and employers

# Te Puni Kokiri Cadetships Programme is another trades training initiative for Māori in the construction and growth industries

Cadetships offer Māori the opportunity to gain confidence, employment experience, general and job-specific skills, formal qualifications, industry networks, and employment. The cadetships offer employers an opportunity for capability building, and a relatively inexpensive option for recruitment.

The programme partners with employers in growth industries to recruit, train, mentor and provide at least six months paid employment to Māori cadets. Over 95 percent of cadets have remained employed with their employers well past the initial six month programme.

As part of the programme, Te Puni Kōkiri provides a \$10,000 subsidy (per cadet) to employers in growth industries to employ and support Māori cadets for at least six months. It allows employers flexibility to recruit and support staff in a manner that best meets the needs of their business. It also requires employers to provide training/development

These cadetships are not limited to the construction sector, but are spread across several growth industries.

# Māori Working in the Construction Sector

Many Māori working in construction sector already hold high-skilled positions as managers, technicians, and trades workers. These skills are in high demand and there is the opportunity to support more Māori into high skill and high earning roles in the sector.

However, Māori also make up a large proportion of the lower skilled end of the workforce. In addition to earning less these labourers and other low skilled workers have lesser job security and are most vulnerable to business cycle effects.

Māori incomes in the sector have risen markedly in the last decade alongside income increases in the wider sector. While Māori working in construction earn more than employed Māori generally Māori earn less than their non-Māori counterparts.

Increasing numbers of Māori in the sector are self-employed. The majority of these people are in construction services, typically working as subcontractors. Māori are also becoming self-employed much younger than their counterparts in the sector.



# Many Māori are technicians and trades workers, but Māori are twice as likely to be in low skilled occupations

Over half of Māori in the construction sector hold skilled positions (managers, professionals, technicians and trades workers). However, the majority of them are tradespersons. Māori are only half as likely to be engineers and architects as non-Māori.

Roughly one in every five of workers employed as labourers in the construction sector is Māori. More than one in every five Māori in the sector is a labourer, compared to one in every ten among non-Māori.

As low skilled employees, labourers are the most vulnerable to business cycle effects. Firms tend to gain and lay-off labourers as the workloads demands.

People with construction skills are in high demand, and there are many opportunities for careers in the sector. However, this demand is predominantly for skilled persons.

Construction careers with high projected growth over the next five years include:

- » construction project managers (6 percent);
- » carpenters and joiners (5.4 percent);
- » bricklayers and plasters (4. 9 percent);
- » clay and concrete operators (4.7 percent);
- » painters glaziers, roofers and plumbers (4.4 percent); and
- » building and plumbing labourers (4.3 percent).

### Many Māori are technicians and trades workers



### Most Māori work in construction services

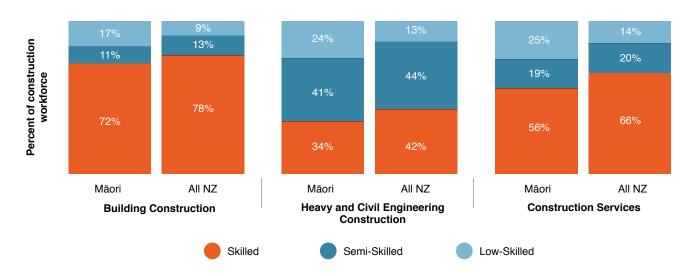
More than half of Māori working in the industry are in the large and diverse subsector of construction services. Many of the occupations in this sector are those that are subcontracted to large and small building projects. These include electricians, plumbers, joiners, carpet layers.

The sector is generally characterised by high levels of self-employment. Roughly 38 percent of those active in the sector are self-employed. Only 22 percent of Māori in the sector are self-employed.

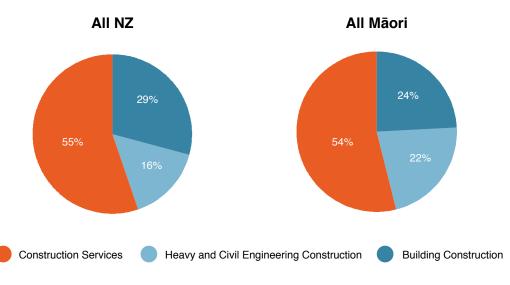
Compared to the total distribution of persons working in the industry Māori are overrepresented in civil and heavy engineering roles and are less likely to be involved in building and construction. (See pie chart below)



### Many Māori are in skilled roles, but more Māori are in lower skilled roles than the sector average



### **Employment by Subsector**



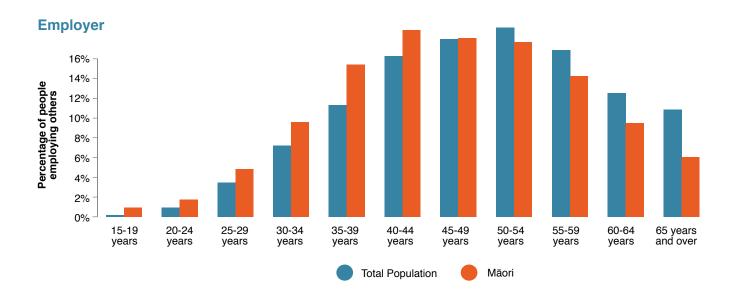
# Māori working in the sector are younger than their counterparts

On the whole, Māori working in the sector are younger than their counterparts. One fifth of the Māori workforce in the sector is under 25, reflecting a Māori workforce that is younger than the wider New Zealand workforce. As at June 2014, two out of five Māori in the workforce were under 35 years of age. This compares to one in three for Europeans.

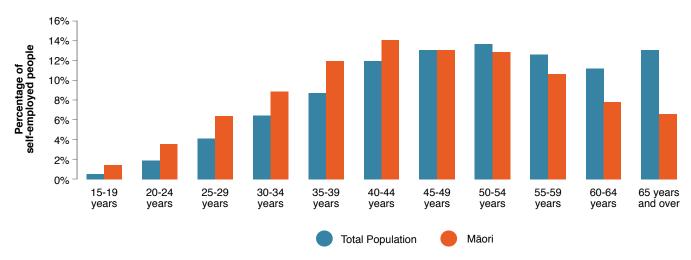
Notably, Māori become self-employed and employers younger than the rest of the New Zealand population.

For Māori, the levels of self-employment increase as the population ages, peaking at the 40-44 year age group and then declining steadily. This differs from the average New Zealanders in this sector, which peaks at the 50-54 years age group and does not decline as steeply in the years leading up to retirement.

Interestingly, roughly 14 percent of Māori working in the sector are women. This is the same for the sector generally.



### **Self Employed**



Source: New Zealand Census 2013, Statistics NZ

# Movement within the sector is seen in the lower end of the skills spectrum

The majority of people moving in and out of the construction sector are coming from or going to other industries – most commonly manufacturing, retail, agriculture, forestry and fishing. It seems that the majority of this is at lower skill levels – essentially labourers moving between unskilled opportunities.

Increasingly those leaving the construction workforce are moving out of the labour force. This includes moving into study, undertaking caring responsibilities, and retirement.

Currently, data does not provide the basis for how those working within the sector move from role to role and forge careers. That said, it has been acknowledged that career paths within the sector are generally hazy and need to be better understood.

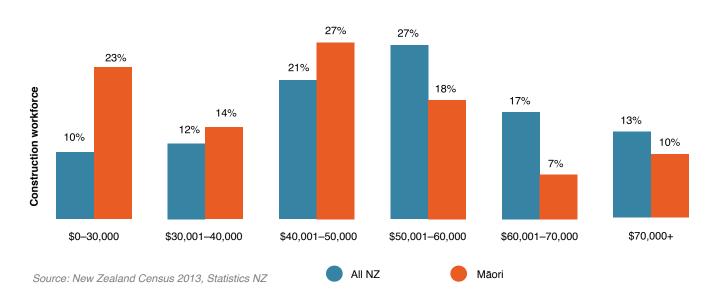
### Many Māori are earning well above \$40k annually, but Māori are earning less than sector averages

Māori incomes in the sector vary widely, reflecting the range of skills and positions held by Māori in the sector. Many are earning well above \$40,000 annually.

Māori in in the sector earn well by comparison to Māori in other sectors. The median income for Māori working in construction is \$3,600 higher than the median income for employed Māori generally.

However, proportionally more Māori are in lower paying jobs in the sector. This reflects Māori clustering in lower skilled labouring positions.

#### Across the sector Māori are earning less than their peers



Incomes for Māori in the sector have been rising over the last decade. This is most noticeable among Māori who are employers. Māori employers had a median income \$59,600 in 2013, almost 50 percent more than they were earning in 2001.

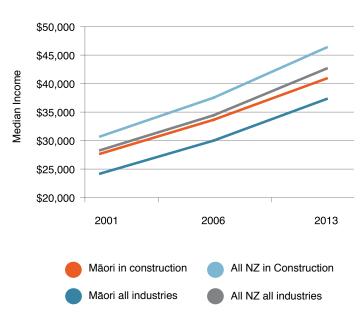
Increases in Māori median incomes have occurred in the context of wider income growth in the sector spurred by the increased demand for construction skills.

Across all regions, the median income for Māori working in the construction sector is higher than the median income for Māori working in the region. Nationally, Māori working in the construction sector still earn less than the New Zealand median income for employed people irrespective of whether they are a paid employee, an employer or self-employed.

To be self-employed in the construction sector does not necessarily equate to earning more. Self-employed persons without employees earned less than any people who are employees of others. The median income for self-employed persons with employees is \$3,900 lower than the median income for people who are employees of others.

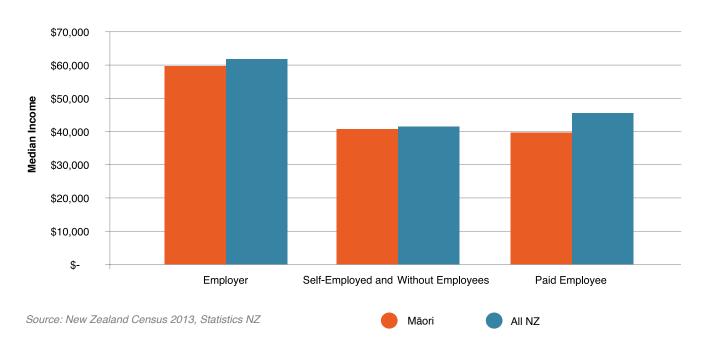
However, for Māori this is not true. Māori sole traders earn roughly \$1000 more than Māori who are employees. This reflects the lower wages earned by Māori employees relative to the sector median.

### Incomes are on the rise, but Māori are consistently earning less than their peers



Source: New Zealand Census 2013, Statistics NZ

### Earnings for sole traders are higher than employees among Māori



# There is large demand for skilled construction workers

There is currently a large demand for skilled construction workers to meet the increased workloads created by the Canterbury rebuild and growth in Auckland and other cities.

Construction was the single largest contributor to employment growth for the year ending June 2014. More than a third of this growth occurred in Canterbury.

Job prospects in the construction sector are generally positive. Ministry of Business, Innovation and Employment (MBIE) forecasts show that employment in construction and utilities industry will grow at 2.6 percent to 2016, as compared to total employment grow forecasted at 1.6 per cent.

Strong employment growth in the sector is anticipated over the next three years and continuing into the medium and long term.

In particular the demand is for skilled persons such as painters, joiners and managers among other skilled professionals. In the year from July 2013 to July 2014 there has been a 58 percent growth in the number of advertisements posted for seeking Construction Managers.



### Posted vacancies in construction and engineering are on the rise



Source: JobsOnline, Ministry of Business Innovation and Employment



### Māori Business Performance

Currently we do not have sufficient tools to identify Māori firms within the wider economy. We are, however, able to identify self-employed Māori. Māori self-employment in the sector has grown by nearly 50 percent in the last decade. This is much faster than the rate of growth in the rest of the sector. Close to one in every five Māori in the sector is self-employed.

# Identifying Māori Firms is a Challenge

There is no agreed definition of Māori business. Even where there is an agreed standard set of criteria, current tools for examining business performance in New Zealand are limited in their capacity to identify and examine the performance of Māori firms in the construction sector or in the economy as a whole.

At present, there are limited ways of identifying Māori firms. One manner is through the identification of Māori authorities. These are Māori authorities or businesses that are eligible to be Māori authorities based on classifications in the New Zealand tax system.

While businesses that fall into this classification are clearly a part of the Māori economy they are a small subsection of Māori business or businesses owned by Māori. In March 2013, there were 7,920 jobs within Māori authorities across all sectors. Māori authorities are generally active in sectors such as rental, hiring and real estate services. Less than 5 percent of Māori authorities are classified in the construction industry.

Modelling work conducted by BERL estimates the 2010 Māori economy to total at least \$36.9bn. Of this they estimate that \$1.4bn of assets are held by self-employed Māori and Māori employers in the construction industry. By this estimate Māori firms control 6.7 percent of all assets held by firms in the sector.



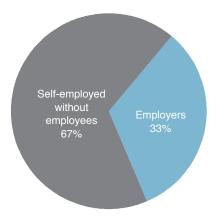
# Self-employment is a proxy for understanding Māori firms and their business performance

Self-employment is one lens through which we can gain insight in to some aspects of Māori firms in the sector. While there is no direct correlation between the number of self-employed persons and the number of firms, self-employment is a proxy by which Māori businesses can be identified.

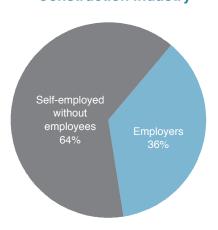
Of the 19,000 Māori working in the construction sector, 4,000 are self-employed. Of this, roughly a third are

business owners employing others. We are limited in our ability to know the characteristics of these firms. Current sources are not able to provide the basis for understanding how Māori firms may differ from others across many dimensions such as turnover, size, or employment patterns.

### Māori in Business - Construction industry



### New Zealanders in Business - Construction industry



Source: New Zealand Census 2013, Statistics NZ

### Self-employment is growing among Māori

The number of Māori who are self-employed in the construction sector has grown markedly since 2001, from 2,700 to 4,000 in 2013. This is a growth of nearly 50 percent. This is 10 percent faster than the average for the sector overall.

	Self-Employed Individuals		Self-Employment as a Proportion of Employment			
	2001	2006	2013	2001	2006	2013
Māori	2,700	3,900	4,000	22%	20%	21%
Total NZ	40,000	51,700	51,400	39%	35%	34%

Source: New Zealand Census 2013, Statistics NZ

Since 2001, the Māori share of self-employment in the sector also grew, from 6.8 per cent to 7.8 per cent. This growth was especially marked in Canterbury, where Māori self-employment more than doubled over the period. While this growth can be largely attributed to the Canterbury rebuild, it is worth noting that Māori self-employment over the period grew at a much greater rate than all self-employment grew, or 125 per cent of the speed of growth in the sector generally. This growth of Māori self-employment doubled the Māori share of self-employment within the Canterbury region to six per cent.

# The regional distribution of self-employment is the same for Māori as the rest of the population

The distribution of self-employment across the regions for Māori is much the same for all firms in the sector. This pattern of distribution is also much the same for the distribution of firms across the regions as measured by Statistics New Zealand's business frame. Māori self-employment mirrors firm distribution in the sector across the regions.

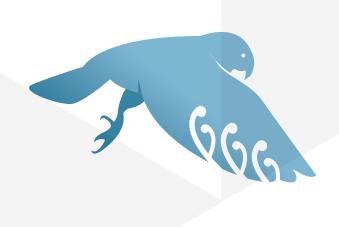
Approximately 60 percent of Māori self-employment is in the subsector construction services. This is much the same as the as the distribution of self-employment for the sector generally.

Construction services is a large and diverse category of activity. Occupations associated with this sector include plasterers, plumbers, joiners, electricians, and similar. These persons often act as sub-contractors to building projects.

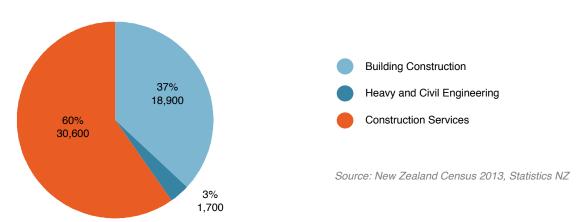
### Self-Employment in Construction by Region (All NZ)

	Number of Self-Employed Persons	Regional Share of Self- Employment
Northland Region	2,100	4%
Auckland Region	16,500	32%
Waikato Region	4,900	10%
Bay of Plenty Region	3,400	7%
Gisborne / Hawke's Bay Region	1,800	3%
Taranaki Region	1,200	2%
Manawatu-Wanganui Region	2,000	4%
Wellington Region	5,600	11%
Tasman / Nelson / Marlborough / West Coast	2,300	5%
Canterbury Region	8,100	16%
Otago / Southland	3,500	7%
Total	51,400	

Source: New Zealand Census 2013, Statistics NZ



### Most self-employment is in construction services (All NZ)



### Māori Business Facilitation Service

Te Puni Kōkiri provides business support services through its Māori Business Facilitation Service (MBFS). Open to all Māori company directors and business owners, MBFS provides services ranging from mentoring to assistance with the development of expansion plans.

Eight per cent of businesses accessing the MBFS are active in the construction sector. The majority of these construction sector businesses have turnover of less than \$100,000 per annum.

Roughly half of the construction firms accessing MBFS are "new businesses" – firms in the early stages of development – and are generally seeking assistance with setting up the business. The other half of these firms are most often seeking assistance for growing or expanding their business.

# **Challenges for Construction Firms**

The construction sector is acutely sensitive to changes in the economy. The sector is highly cyclical and highly labour intensive making planning for investments in people or equipment difficult.

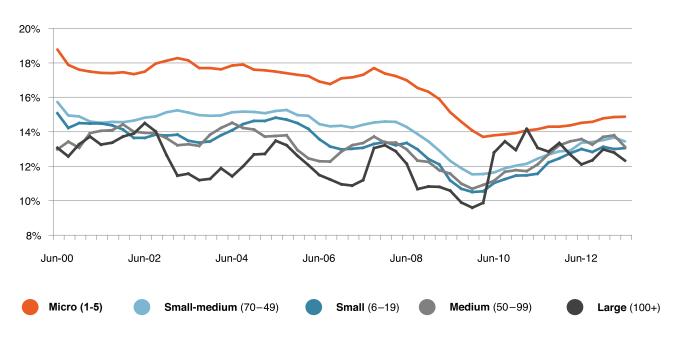
The rate of firm births and deaths in the sector generally tracks much higher than the rate for New Zealand firms.

In the period from 2009-2012, 55 per cent of residential construction firms with no employees made a loss. For the same period 25 per cent of firms with 1-5 employees also made a loss.

Further, the job turnover rate (the rate at which jobs are created and destroyed) has been consistently higher in the construction sector than in the wider economy.

Worker turnover rate in construction – the rate at which workers enter and exit the sector – is also high, indicating workers transition in and out of the sector frequently. Those moving in and out of the sector are often those with lower skills. Sectors with similar turnover rates are characterised by heavily seasonal and part time work. Of sectors with predominantly full-time workers, construction has one of the highest worker turnover rates in New Zealand.

### Worker turnover is highest for the smallest firms



Source: Business Demography Statistics, Statistics NZ

The smaller, non-owner operator firms in the sector, those with 1-5 employees, experience much higher rates of worker turnover than firms with six or more employees.

Low productivity levels in the sector also pose an important challenge for industry. The New Zealand construction sector is dominated by small businesses. Fragmentation in the industry contributes to high building costs and lower productivity, it further causes difficulties in building economies of scale.

There is no consistent pattern of productivity across firm size. However, subsectors of the industry do perform differently. Non-residential building is generally a higher productivity sector while firms in structural steel erection, painting and decoration, tiling and carpeting, bricklaying, carpentry, and plastering and ceiling tend to be lower productivity.



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