Older workers in the construction industry

A summary of research on the social, economic and physical demands that impact on mature workers in the building and construction industry, both in New Zealand and overseas - with special emphasis on BCITO learners and employers.
“Employers have to look at how to change job roles to suit ageing workers, especially those in a physical role. They should view the physical limitations of older workers as an issue that should be addressed like any other HR issue as opposed to a barrier.”

Quote from: Ruma Karatiana (CEO of BCITO) speaking at the Employment of Older Workers’ Summit held in Wellington, New Zealand in September 2006

So what are the barriers and limitations for older workers in the building and construction industry, and what do overseas and New Zealand studies reveal about the social, economic and physical demands for older workers?

What are the prejudices that older workers encounter?

What are the facts and figures and unique characteristics of mature BCITO learners and their employers and do these differ from overseas counterparts?

Finally, what benefits accrue from the development and retention of older workers and what are the key elements of recruitment and retention?

Older workers – labour market outcomes

New Zealand is near the top of the OECD in rates of workforce participation among older people. Workers aged 55 years and over now comprise one in six of the total labour force. There are more older people in work than ever before, and the numbers are still growing.

By extending their working lives, older workers have also gained important social and economic benefits such as increasing their opportunity to remain active, to save, and to maintain their living standards. This growing pool of older workers has allowed firms to access the valuable skills of experienced workers.

Older workers in the construction industry slightly increased their employment share for the period 2002-2007 and achieved stronger growth in occupations which require more skills. They are more likely to command better prospects and higher wages such as managers, professionals, and technicians.

Source: Older workers labour market outcomes, Department of Labour, March 2007

Of the males aged 55 to 64 who are self-employed, 18% are working in construction.

Source: The working patterns of older New Zealanders, Department of Labour, October 2009

It is important to ask what constitutes ‘old age’ for building and construction workers, and how older workers can maintain their productivity and effectiveness in what is often a stressful and physically demanding environment.
Construction workers in carpentry and the specialist trades undertake work which can be physically demanding, in stressful environments, and often working long hours in potentially hazardous conditions. As a result, not only are accident rates high both in New Zealand and overseas, but many workers are unable to continue in the trade after the age of 50 years.

**Overseas workers – an international comparison**

In a UK study *[1] a series of interviews with workers in the construction industry identified the impact of working conditions on their health and career paths. These are summarised under a series of ‘Findings’ which cover both the positive and negative values that affect older workers aged between 41 and 64 years.

**The Issues**

**Positive Value**

The value placed on older workers should not be underestimated. In this study and many other overseas studies and surveys, both management and workers themselves recognised the value of retaining older workers within the industry for their skills, workmanship and work ethic. In the UK this is important as there is currently a recognised skills shortage within the industry. American and Canadian studies also speak of an ageing workforce and the need to retain older workers and mentor younger workers in the trade.

Refer to: *Strategies and best practices for the recruitment, retention and employment of older workers in the construction industry* Construction Sector Council, Canada 2011

**Negative Value**

This list is considerably longer.

The authors state that the nature of construction work has changed over the past two decades in the UK. A *working environment which is hostile to the older worker* has been created by an increased reliance on pre-assembled materials such as stairs, wall frames and roof trusses, and increasingly tight profit margins.

Older workers are perceived to be slower and unable to keep up with the pace set by the younger workers. The ability to hit targets is crucial for construction companies and site managers either need to complete jobs on schedule or suffer financial consequences. In the UK study this negative issue is perceived to far outweigh the positive attributes offered by the older worker.

In addition, the interviews revealed that older workers are seen to be resistant to change and in many cases adopted inappropriate safety behaviours.

*[1] Understanding the Older Worker in Construction Joanna Leaviss, Alistair Gibb and Phil Bust, A Strategic Promotion of Ageing Research Capacity initiative UK, January 2008. The study included health and safety managers, site managers, older workers (including retired workers), union representatives, younger workers, and equipment and materials suppliers. All had at least 10 years’ experience of the industry. The older workers were aged between 41 and 64 years, and the retired workers between 72 and 79 years. Disclaimer – Except as permitted for academic, personal or other non-commercial purposes, users must not reprint or electronically reproduce the document. This document has been produced from unpublished data that has not been peer-reviewed. The research was funded by EPSRC and BBSRC but they are not responsible for the content.*
Industry-level Issues

Direct versus indirect labour:
The type of employment tenure is perceived to have a direct effect on workers’ experience of the construction industry.

Employers who employ their workforce directly are perceived as having to ‘look after’ their older workers by finding them less physically demanding tasks when necessary. They are also obliged to provide sick pay when a worker is unable to work through ill-health/injury.

However, much of the construction industry employs their workforce through subcontractors with many workers being self-employed (indirect labour).

Being self employed and finding work through subcontractors:
Workers are perceived to be chosen for a job on the basis of being fit and able to complete the job quickly
- Allowances are not necessarily made for the slower pace of the older worker
- If a self employed worker is unable to work through ill-health, he or she does not get paid, and must therefore rely on private insurance or state benefits.

Most of the older participants in the UK study reported that they would prefer to be ‘on the books’ (employed directly).

The construction industry is highly competitive. This financial pressure results in extremely tight margins. There is a perception that these small margins make it financially impossible to make allowances for the physical ‘slowness’ of the older worker. A slow worker is therefore perceived to cost more money than a fast worker, which is largely irrespective of the quality of work produced. Because of the competitive tendering process, many contractors are reluctant to bear this cost. It was suggested by several participants that the only way to address this issue would be for the client to bear the cost.

Also in times of economic downturn and industrial restructuring workers 45 years + are seen as less productive and ‘should exit the workforce to open opportunities for younger people.’ These trends have occurred not only in Australia but in developed countries worldwide. Critical interpretive research into the life world experiences of mature-aged workers marginalised from the labour force PhD thesis, Christopher Kossen, James Cook University, Australia 2008 page 3

Pay structure:
Much of the construction industry relies on bonuses, or piece work - work undertaken at a prior agreed price. This type of payment system which gives financial rewards for speed, mainly appeals to younger, physically fit workers even though there is a belief that the quality of the work suffers through this type of payment system.

Many older workers reported that they would prefer payment at a ‘day rate’ because the focus becomes on quality rather than speed.

Employment flexibility:
Older workers want to stay in the industry. However, as they get older, many prefer to work part-time or on day rates. NOTE: The Canadian study asserts that well-planned flexible work arrangements may actually save an employer money and increase productivity by allocating
workforce resources more appropriately, and gives examples of adjustable work schedules. Refer to Construction Sector Council, Canada 2011, page 22

Health problems are trade specific:
The Nature of Construction Work and attitudes to Health and Safety:
Preventing chronic ill-health and injury in construction workers is vital for reducing early retirement from the industry. However, **workers accept ill-health and injury as ‘part of the job’ with the result that early retirement is an accepted part of the industry.**

This is compounded by the fact that many workers feel the Health and Safety regulations are ‘over-the-top’, and prevent workers from doing their job fluently.

Management perceives that older workers are less likely to follow safe practice for self-protective behaviours, such as wearing PPE (Personal Protective Equipment)

The physically demanding nature of the construction industry puts all workers at risk of injury such as strains, sprains, and work-related musculoskeletal disorders. The risk is compounded in older workers and this can result in days away from work and ultimately an early retirement due to chronic conditions.

Many overseas studies relay the same catalogue of health and safety issues. Indeed the combination of the nature of employment and normal ageing often results in many tradespeople in the industry being unable to continue working beyond the age of 50 years.

A German study of nearly 5000 employees in the German construction industry (made up of carpenters, plumbers, painters/varnishers, plasterers, bricklayers and unskilled workers), found that compared to white collar workers, **aged 40-64 years**, there was a higher prevalence of hearing deficiencies, signs of obstructive lung diseases, increased body mass index, and musculoskeletal abnormalities as well as skin disorders such as eczema/inflammation, and itching. It was also noted that about half of all blue collar construction workers were current smokers and daily alcohol drinkers.

In the 5 year follow up the most important causes of disability were diseases of the musculoskeletal system (40%) and disease of the cardiovascular system (24%). Retirement due to disability was 63% of those working in the construction industry compared to 44% of all cases in Germany.


A Dutch study also reported that older construction workers have more complaints about their health than workers in other age categories – especially working in awkward postures, and are particularly at risk for musculoskeletal disorders.

**Monitoring working conditions and health of older workers in Dutch construction industry** Wiley-Liss, Inc, 2010

In the United States a study of workers’ compensation claims (Washington State) shows that construction work accounted for 10 of the top 25 sectors in need of interventions to prevent neck, back and upper extremity musculoskeletal disorders

Existing data on the prevalence of musculoskeletal ‘trouble’ shows that while there is considerable variation between trades in the levels of problems reported in different parts of the body, there is no distinct separation of any one trade from the rest of the industry. Instead, the parts of the body worst affected appear to be trade-specific and concentrates on disorders of the low back, the upper limb, and the knees.

**Floorlayers** (such as carpet fitters) have an increased prevalence of radiological signs of knee osteoarthritis. Refer to: Jensen et al. (2000) **It is mostly found among workers older than 50.** They concluded that the more knee-straining postures required by floorlayers seemed to be a more important risk factor than heavy physical work.

Source: Musculoskeletal problems in bricklayers, carpenters and plasterers: Literature review and results of site visits Adele Reid, Andrew Pinder and Simon Monnington Project Leader: Dr ADJ Pinder Human Factors Group HSL/2001

**Joiners** perform repetitive tasks, for example hammering and the use of screwdrivers. These can cause problems in the joints, such as tennis elbow, and can be made easier by using power tools such as using cordless drills and using nail guns. However, since many workers are expected to provide their own tools, the cost of power tools can sometimes be a disincentive to their use.

**Bricklayers** are constantly manually handling heavy materials, which often results in the development of musculoskeletal disorders. Manual handling aides and lifting devices can make some of this work easier. Older workers would prefer to use lighter materials rather than lifting devices though, which are regarded as a hindrance to fluency of work.

Forklifts are now more readily available to assist with lifting tasks, **but this only eliminates the need for a labourer to carry materials to the bricklayer. Furthermore, this gives the bricklayer the additional job of both loading and unloading, creating an extra physical burden.**
It is clear from the available research that intervention is needed in the construction industry at all levels to reduce the current unacceptably high levels of work-related ill health.

**Potential interventions:**

**Equipment and materials identified as being relevant to older workers include:**
Low-vibration tools; pre-mix mortar; prefabricated units; plant operatives equipment for noise reduction; kerblifting equipment; reduction in weights/lifting - like storing materials off-ground for easier lifting by appropriate equipment such as cranes, forklifts, carts and dollies; scissor-lift; power hand tools; mechanical handlers; ladder assists; PPE; electrical hoists; access equipment (such as stair access on scaffolding); fall arrest equipment; facilities, for example toilets and catering; block splitters; conveyor belts; long-handle shovels; vacuum lifters for glass; and mini-diggers. Additionally, level walkways and shorter distances to staging areas will decrease falls.

**Job accommodation:** Resource: The Benefits of Retaining Older Workers Gerrad Delatte Construction Executive Magazine April 2011
When an employee is injured, the current job should be adjusted to incorporate tasks that can be performed while the healing process occurs. Other forms of job accommodation include allowing more time to complete tasks or shifting work schedules. With this proactive approach, older workers can spend more years in the industry.

**Pre-planning and establishment of appropriate work schedules:**
The extension of work hours and irregular work schedules also can increase health risks. Extended work shifts can cause serious health issues, such as cardiovascular disease, that result in disability retirement, chronic absenteeism and high turnover. Long hours and irregular work schedules increase the work-related injury rate. Employers should carefully plan for staffing and training, and establish appropriate work schedules for all employees.

**Pre-planning and establishment of appropriate design and construction processes:**
Those involved in designing buildings, and planning and managing their construction need to take into account the risks to musculoskeletal health of the different available construction methods, then plan the structure and the construction processes in ways which allow these risks to be reduced so far as is reasonably practicable.

Source: Musculoskeletal problems in bricklayers, carpenters and plasterers: Literature review and results of site visits Human Factors Group Adele Reid, Andrew Pinder and Simon Monnington Project Leader: Dr ADJ Pinder UK HSL/2001/13

**Company health and wellness programs**
Health and wellness programs can help workers reduce health risks as well as occupational hazards.
The article states research suggests that reducing obesity, smoking and manual materials handling may both improve employees’ control over tasks and keep mature workers employed longer.

**Ergonomics programs and training:** In addition to promoting safe work practices, ergonomics programs can implement engineered safety devices and better work procedures. When occupational safety and health training are made a high priority, there’s a better chance of retaining the older workforce.

The U.S. Department of Health and Human Services produced a *booklet which aids in the prevention of common job injuries*. Note: It is stated in the Foreword that there are contractors in the U.S. who are successfully implementing health and safety programs to address these issues, including musculoskeletal disorders.

There are sections covering floor and ground-level work, overhead work, material handling and hand-intensive work with a series of ‘Tip Sheets’ which give solutions (such as work processes) which include benefits to both worker and employer, as well as costs of materials or equipment and where these can be purchased. While some solutions may involve the combined efforts of commercial enterprises and contractors, others can be adopted by individual workers and supervisors.


**TIP SHEET #4**

**Kneeling Creepers**

**Problem**
Many tasks require frequent kneeling, squatting, or stooping because the work is close to the floor.

Kneeling on a hard surface puts a lot of direct pressure on your knee, while squatting puts stress on the tendons, ligaments, and cartilage of the knee joint.

Working in either position or for long periods of time can lead to knee problems, including knee osteoarthritis.

If you work in a stooped position, there is stress on your lower back as well as your knees, possibly leading to back pain and even a serious back injury.

**One Solution**
Use a portable kneeling creeper with chest support. When the job requires kneeling or squatting to work at floor level, these devices will reduce the stress to your knees, ankles, and lower back.
How it works

Kneeling creepers are available with removable seats and cushioned knee supports. They are very low and have 50-75mm casters. The knee supports on one model, for instance, in the booklet, are only 20mm above the floor. The cushioned knee supports reduce the pressure on your knees, just as ordinary knee pads do.

The benefits of the application of ergonomic principles must be explained as studies show that ergonomic interventions can meet with some resistance among experienced workers. For example, Urlings and Wortel (1991) found resistance from workers when an adjustable height platform was introduced in the Dutch building and construction industry, since workers had a negative attitude towards the ergonomic intervention.

A key factor is the usefulness of including ergonomic awareness as part of carpenters’ training and the need for this education to be ongoing.

An ergonomics awareness education program developed by Albers et al. (1997) for apprentice carpenters in the USA was found to be successful in increasing apprentice carpenters’ awareness of workplace musculoskeletal disorders (WMSD) within carpentry and construction as well as for identifying potential WMSD risks.

Further scientific work needed re ergonomic risk factors:

There is a need for further scientific work to be carried out to examine the ergonomic risk factors of wet plastering and floor screeding.

The UK study (which also contains a detailed trade-specific ergonomic assessment and aids for the prevention of common job injuries) also adds that it is essential that carefully documented work histories and medical histories are recorded as part of the health examinations of construction workers in order to achieve the best potential in preventing occupational and chronic diseases.

Source: Musculoskeletal problems in bricklayers, carpenters and plasterers: Literature review and results of site visits Adele Reid, Andrew Pinder and Simon Monnington. Project Leader: Dr ADJ Pinder Human Factors Group UK HSL/2001/13 pp24-25
There are many barriers to the effective deployment of interventions designed to alleviate the inherent issues of working in the construction industry.

The CFMEU (Construction, Forestry, Mining & Energy Union of Australia) has launched a campaign to save its older workers.

“The days of mature age workers being thrown out like broken toys must end as part of the resolution to tackle the demographic time bomb, but also as a matter of social justice.”

“Many of the jobs once reserved for mature age workers – gatemen, traffic control, hoist driver nipper or peggie – are now going to labour-hire and often to backpackers.

“Our union will make the plight of our mature age workers an industrial issue in our industry – many mature age workers could be involved in job planning, training younger workers, ensuring sites are safe, recycling and sustainability.

What is needed is a new approach (by government) that recognises that construction workers may have a limit on the physical strain they can place on their bodies, but there is no limit to their capacity to build excellence through sharing their experience, knowledge and skills.”

Quote from: Construction and General Division National Secretary Dave Noonan - Save older construction workers: CFMEU AAP Simon Lauder October 13, 2009
Barriers to Intervention:

**Personal responsibility**
Some workers are reluctant to wear Personal Protection Equipment (PPE) or use appropriate safety equipment, as they feel this affects how they do the job.

![Lunch atop a Skyscraper](image)

*Lunch atop a Skyscraper* ([New York Construction Workers Lunching on a Crossbeam](image)) 1932, is a famous black-and-white photograph taken during construction of the RCA Building (renamed the GE Building in 1988) at the Rockefeller Centre in New York City. Eleven men are eating lunch, seated on a girder with their feet dangling 256 meters above the city streets. The men do not wear a safety harness, and this typifies the hazardous working conditions of the Great Depression.

**Financial responsibility**
Because of the way the industry is organised, financial responsibility for PPE and equipment is sometimes unclear. Self-employed workers must provide their own tools, but the contractor provides the materials. *If the appropriate materials are expensive, for example, nails and gas for nail guns, they may not always be provided.*

**Site Managers**
Many participants remarked on the differences in the approaches adopted by site managers. They can play a key role in easing the workload of the older worker, such as putting them on more skilled, but less physically demanding work.

An example of this is placing older workers in a position where they can train younger workers in more complex tasks, or assigning them to a safety role, *but these approaches are highly dependent on budgetary and time restrictions.*

**Design Issues**
Design of tools and equipment for construction workers should be inclusive. *Designers and manufacturers reported a reluctance to design specifically for older workers, as there were no financial gains in this due to a lack of demand.* In particular for PPE, the design and promotion of new equipment was reactive to whichever work-related health condition was prominent at the time.

*Participants reported there was currently little market for construction tools designed to be used by older workers,* but if there was a demand they would react to this.
Nature of construction industry
There is a prevailing attitude that nothing could be done to make the job less physically strenuous, and that the job is inherently hard.
However, when encouraged to talk more about their specific job tasks, older workers were able to think of improvements to their own job tasks which could otherwise cause or exacerbate physical injury or ill-health. Source pp9-10, UK study: [1]

Psychosocial factors
Construction workers believe that getting hurt and working with pain are part of the job. Injured workers prefer to work, even with restrictions, finding alternative ways to perform tasks if in pain.

Construction workers also claim that effects of serious work-related injuries reach beyond just the physical symptoms with long term financial and emotional effects to the worker and their families (Welch et al., 1999). Holmström et al. (1992a) reported that 21% of construction workers experienced a high degree of stress.

Significant increases in reports of neck/shoulder trouble and neck/shoulder pain were found amongst construction workers with high levels of psychosomatic and psychic indices; stress, quantitative demands and experience of frequent anxiety about health were also significant. Low levels of job satisfaction were also related to an increased reporting of trouble and pain in these areas of the body. Refer to: Musculoskeletal problems in bricklayers, carpenters and plasterers: Literature review and results of site visits Human Factors Group HSL/2001/13 page 5

Discrimination against older workers
From a scan of various overseas sources, this issue is often overlooked, or only oblique reference is made to it. The South Australian study does mention, however, that while a substantial majority of older workers believe that there is discrimination in the workforce against mature workers, fewer of them report discriminatory attitudes from colleagues and employers.

It also reports that there was strong support for measures against age discrimination and age-biased stereotypes that limit opportunities for older workers. (Note: The UK study responses contain age-biased stereotypes by employers and contractors)

The UK study also notes that rules and regulations relating to superannuation, and work-cover policies need to be revised because current policies discriminate against older workers and act as disincentives for older tradesmen who wish to continue working. Refer to page 22

Other interventions

What about training to increase productivity in work beyond retirement age?
In the South Australian study, only two in five respondents in the construction sample saw value in training to enhance productivity and effectiveness of older workers, and that this training was
available to them. However, around four in five saw the value in ‘train the trainer’ courses which would assist older workers to train or mentor younger workers.

Older workers commented that they need **fairer access to training programs** to enable them to update skills, and to keep up with developments in technology, as well as professional development training programs that would enhance specific skills in their particular fields.

Information derived from: *Older workers’ perspectives on training and retention of older workers: Support document- South Australian construction industry study.* David Lundberg, Zaniah Marshallsay University of South Australia © Australian Government 2007

A Dutch construction enterprise has implemented **age-aware human resources policies.** Different worker capacities are taken into account in task planning, where older and more experienced workers are perhaps given more complex tasks, while younger workers might be given the more physically demanding tasks (Naegele & Walker, 2006)

*Employer Strategies for Responding to an Aging Workforce* by Francine M. Tishman, Sara Van Looy, and Susanne M. Bruyère Report to NTAR Leadership Centre New Brunswick NJ March 2012 page 18

A Canadian study also promotes **succession planning** as a way to mitigate risk by identifying and assessing potential leaders and developing career goal/development plans.

*Strategies and best practices for the recruitment, retention and employment of older workers in the construction industry* Construction Sector Council, Canada 2011, page 12

---

**Sample age-neutral training policy for recruiters**

---

**Policy**

[Organization] is committed to ensuring that its hiring and employment policies are age neutral and not discriminatory in any manner. [Organization] is also committed to ensuring that it is recruiting new workers from the total available pool of prospective workers, including older workers.

**Purpose**

This policy ensures that workers involved in the recruitment process are age-neutral in their decision making.

**Scope**

This policy applies to all personnel involved in recruiting new workers to [Organization].

**Procedure**

- Any worker who will be involved in recruiting new workers to [Organization] will receive training in age-neutral hiring before the recruitment process begins.
- This training will emphasize that discrimination in any form is not acceptable, including on the basis of age.
- This training will emphasize the potential benefits to the operations of [Organization] of hiring older workers.
- This training will ensure that job descriptions and selection criteria are applied uniformly to all candidates, regardless of age.

---

The study also noted the **importance of age-neutral recruitment and hiring.** The creation of consistent recruitment and selection processes within large organisations, including policies, as well as training recruiters about age-neutral hiring, are seen as the ways to ensure the best people are being hired for the work, while respecting the law.

**A series of best practices** are also identified and two sample recruitment policies, one for the organisation and one for recruiters are included.
As New Zealand’s population ages and the number of young workers entering the labour market declines, mature workers will become crucial to filling jobs in areas of skill shortage. By international standards New Zealand’s mature employment rates are high, and getting higher.

There is no official ‘retirement age’ in New Zealand and NZ Super is paid from age 65, but you don’t have to stop working to get it.

Our population is ageing, with people staying in the workforce for longer than they did in previous generations, both through economic necessity as well as the desire to contribute and engage with the wider community. This means that while an increasingly large percentage of New Zealand’s labour market is over 55, conversely, the number of people approaching the “entry ages” for the labour market is declining quickly.

Between 2013 and 2023, the number of New Zealanders aged between 15 and 19 is expected to shrink by around 28,000 which means that mature workers are set to play an increasingly important role in the future of the New Zealand labour market.

The characteristics of the New Zealand construction industry

The building and construction sector is characterised by a large number of small firms and a small number of very large firms. Small and medium firms (SMEs) are particularly prevalent in the residential sector and the more specialised trades while very large firms are more likely to work in the infrastructure and commercial parts of the sector.


One in every 12 workers in the New Zealand economy works in the building and construction industry. The very small firms operate with 19 or fewer employees, with 91% having five or fewer employees. They are generally managed and operated by the owner. There is also a large proportion of sole traders (21%).

The data show that the majority of self-employed people in this country are New Zealand European men, aged between 35-59 years.

The industry has workers with a wide range of skill levels. While more than 35% of workers in the industry leave school with no qualification and 25% of workers in the industry have no qualification of any kind, there are also many highly skilled professionals including architects, designers, engineers and surveyors. Like SMEs worldwide, New Zealand SMEs tend not to have specialist staff at management level and are not part of a larger business or group of companies with access to managerial expertise. Indeed, it is due to the prevalence of very small businesses and the regular changes to economic conditions, that management skills are lacking in the sector.

The World Bank’s Entrepreneurship Survey shows that New Zealand had the highest density of businesses (the number of enterprises per head of population) of all OECD countries measured.

The majority of SMEs are less than six years old, with very few over 20 years old. By comparison, larger enterprises tend to be much older. Most of the larger enterprises have been operating for 10 years or more.

The Construction sector was one of the first industries to be hit by the global financial crisis and recorded the largest drop in enterprise numbers, from net births of 1,661 in 2008 to net deaths of 3,422 in 2010. However, repairing and replacing building and infrastructure following the earthquakes in Canterbury is going to generate a significant upswing in building and construction activity over the next 5-10 years. Repairs needed for homes that have been identified as ‘leaky buildings’ and a higher demand for business as usual, as well as work due to pent-up demand,
especially in Auckland, means that the New Zealand construction industry is experiencing a resurgence of unprecedented growth.

The demand for labour in the industry will be dramatically increasing over the next 5 to 10 years, which leads to some important questions about the skills of the industry:

What are the optimal trade skill sets and how are they best kept current?


Older construction workers who have lived through the global financial crisis (and have sometimes survived other recessions within the industry) are mostly small SME owners. They are survivors who have acquired business savvy and a long-term focus. Indeed, businesses owned by self-employed people aged between 40-59 years are the most likely to survive.

SMEs in New Zealand report – page 9

They also make up a large proportion of new SME owners and will continue to do so as the mature employment rates rise.

Older construction workers may also provide support, guidance and mentoring/training for young tradespeople, and often take on apprentices (through the BCITO, Flooring and Decorating ITOs, and Joinery ITO). They are the backbone of the construction industry.
What constitutes the term ‘older worker’ in the New Zealand construction industry?

It is difficult to talk about the older worker in the construction industry.

Prime aged workers in the 35-44 years age group could already have been in the trade 20+ years with the resultant wear and tear on joints and other injuries, while overseas studies consider workers from 41 to 55 years+ within the ‘older aged’ cohort of workers.

To recap:
A considerable body of research stresses that by 50 years many construction workers are forced to retire because of chronic health conditions.

The policy documents, however, refer to older aged workers as 60-65+ years, and best practice documents are usually written with that age group in mind.

Other research stresses the need to continue working at age 60+ years, and wellness and ergonomics programs are strongly recommended for construction workers of all ages to enhance and extend working life within the industry.

So what does the BCITO data tell us?

EMPLOYERS BY MAIN TYPE OF BUSINESS
Larger firms (49+ employees) within the BCITO database are most likely to be in commercial and civil, medium sized firms (10-48) residential housing and commercial, while smaller firms (1-9) are residential housing and renovation.

Whilst all these SMEs take on BCITO apprentices, the majority of learners who train within invested smaller firms (1-9) and larger firms tend to achieve more completions than within the medium-sized firms, according to a BCITO survey undertaken in 2010.
The research also found that 85% of BCITO employers are qualified (that is they have successfully completed an apprenticeship or similar). The survey found that compared to unqualified employers, qualified employers:

- are more likely to have a current trainee
- have greater potential in a good market
- have higher completion rates
- are more likely to have trainees complete within 4 years (for level 4 qualifications such as carpentry)

These employers are also more likely to be good evaluators of learning. As part of the assessment team for the BCITO, it is their maturity and experience and investment in the future workforce which often ensures a successful outcome for apprentices – the achievement of a national qualification in carpentry or the specialist trades.

The quote below (from a research report contracted by the BCITO) gives a very succinct explanation as to why an approach that pays attention to supporting the apprentice’s learning, and that fosters real understanding, is important for work as a carpenter:

"Kids have to be in the industry. Yes, they can hang a door. Yes, they can do straightforward framing. Yes, they can get qualified. But it's not the guy who can do the job; it's the guy that can get over the job—in other words, it's important to be a builder that can problem-solve and think—especially as many jobs are not straightforward and designers add more and more complexity." (Conrad, employer)


Older workers (both employers and trainees) are also well represented in skills training with the BCITO (see graph below).

Over 12% of total new trainees in 2012 40 years and over, were working towards national qualifications in carpentry and specialist trades, as well leading hand/supervisor qualification and the Experience Recognition Process (ERP). [The latter enables tradesmen with considerable building experience (at least 7 years) to gain recognition for some or all of their skill and knowledge against the National Certificate in Carpentry. With the achievement of the National Certificate in Carpentry they can then become Licensed Building Practitioners]. See example overleaf

**Industry trainees by industry training organisation and age group at 31 December 2012**

<table>
<thead>
<tr>
<th>Industry Training Organisation</th>
<th>19 years or less</th>
<th>20-29 years</th>
<th>30-39 years</th>
<th>40-49 years</th>
<th>50 or more years</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building and construction</td>
<td>284</td>
<td>1,643</td>
<td>668</td>
<td>283</td>
<td>85</td>
<td>2,963</td>
</tr>
</tbody>
</table>

Excludes Modern Apprentices

Participation workplace-based learning – Statistics NZ Data
Peter Bennett of Selva Residential in Auckland gained his carpentry qualification through the ERP process in 2011: This is his story:

I reckon I was a good builder. But I wasn’t *qualified*...

If you’re anything like me, you’ll have noticed the industry is changing. And to be a professional builder, a national qualification is fast becoming a necessity.

For clients these days, perception is reality. You simply miss out on credibility if you’re not qualified. Rather than having to explain to clients how experienced I was, I just wanted to be able to say; I’m a qualified professional. I’m licensed. I’m the real deal.

After starting out in a pre-cut and nail company, I shifted to work with a builder, but could never get an apprenticeship. So I just kept on building and learning. I didn’t need a qualification to work in those days. After a few years, I assumed I had missed the opportunity to get qualified. That was nearly 30 years ago.

Through my company, Selva Residential, I’ve put two guys through their apprenticeships and have another one in his third year. I know when I was that age I wasn’t thrilled about missing out.

Not too long ago I bumped into someone from the BCITO who told me that I could still get the BCITO’s National Certificate in Carpentry. I was intrigued to say the least!

A BCITO Training Advisor examined my portfolio, signed off aspects of the qualification that I was clearly competent in, and developed a custom training plan to fill my knowledge gaps.

I was then given books to work through at my own pace, and I definitely learned some things in the process. I’m happy to say that after 27 years, I was awarded my National Certificate in Carpentry.

*It feels great to say I’m a qualified professional.*

“I tell this story because I imagine many other builders out there are in the same boat...”
Employers in the construction industry are becoming more engaged with the idea of further training as part of a career pathway within the sector. In the example below, employers with BCITO trainees have been asked to consider professional development for apprentices who have recently graduated.

Question: What types of course or training, if any, do you think would support further professional development of graduated apprentices to advance their careers?

<table>
<thead>
<tr>
<th>Table 3: Training courses</th>
<th>Northern Area</th>
<th>Midlands Area</th>
<th>Central Area</th>
<th>Southern Area</th>
<th>New Zealand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity surveying</td>
<td>57%</td>
<td>64%</td>
<td>59%</td>
<td>42%</td>
<td>55%</td>
</tr>
<tr>
<td>People management skills</td>
<td>50%</td>
<td>64%</td>
<td>44%</td>
<td>54%</td>
<td>52%</td>
</tr>
<tr>
<td>Compliance and regulations</td>
<td>57%</td>
<td>59%</td>
<td>44%</td>
<td>54%</td>
<td>53%</td>
</tr>
<tr>
<td>Supervision qualifications</td>
<td>57%</td>
<td>50%</td>
<td>41%</td>
<td>46%</td>
<td>48%</td>
</tr>
<tr>
<td>Small business management</td>
<td>50%</td>
<td>59%</td>
<td>50%</td>
<td>31%</td>
<td>47%</td>
</tr>
<tr>
<td>Accounting and tax</td>
<td>29%</td>
<td>36%</td>
<td>26%</td>
<td>27%</td>
<td>29%</td>
</tr>
<tr>
<td>None</td>
<td>4%</td>
<td>0%</td>
<td>3%</td>
<td>4%</td>
<td>3%</td>
</tr>
<tr>
<td>Other</td>
<td>21%</td>
<td>9%</td>
<td>0%</td>
<td>8%</td>
<td>9%</td>
</tr>
<tr>
<td>n=110</td>
<td>28</td>
<td>22</td>
<td>34</td>
<td>26</td>
<td></td>
</tr>
</tbody>
</table>

And employers are seeing the value of maintaining and challenging their own skill base. As part of the new licensing laws, builders are required to keep up with changing legislation and research trends, therefore they are engaging more and more in further learning – often at advanced levels. Note: The BCITO also develop qualifications in architectural technology, construction management and quantity surveying.

Steve Prentice, Commercial Manager at Corbel Construction, began his career in the construction industry as an apprentice almost thirty years ago, and is also now furthering his personal development by undertaking a Bachelor of Applied Management.

Mr Prentice is only in his first semester, but says he is enjoying the challenge of getting back into studying. He chose to further his study to ensure that he kept up with industry standards.

“You can get to a certain level with experience, but then you need to formalise everything in order to keep tracking up a certain path. You get overtaken if you don’t keep up with the flow.”

From: BCITO helps up-skill builders Employer Development Grants available for employers with current BCITO apprentices. June 2012 article
The BCITO older learners

It is a testament to their commitment to workforce participation, and desire to maintain and enhance their skill base - especially in light of the new regulatory environment - that older learners have been engaged in training with the BCITO up to 69 years of age.

From the BCITO data base it is evident that older workers have signed up for a raft of qualifications on offer. The majority have been in training for the carpentry certificate, but the other specialist trades are also well represented. The BCITO supports apprentices and their employers in these fields:

- Brick and Blocklaying
- Carpentry
- Concrete
- Frame and Truss Manufacture
- Interior Systems
- Masonry
- Proprietary Plaster Cladding Systems
- Solid Plastering
- Tiling

The ‘older’ workers in training make up 10% of the total number of learners who have been in training with the BCITO.

There are unique characteristics of the different age groupings, which have been divided into:
- 40-49 years
- 50-59 years
- 60-69 years

The ‘older’ workers in training make up 10% of the total number of learners who have been in training with the BCITO.

The ‘older’ workers in training make up 10% of the total number of learners who have been in training with the BCITO.

The ‘older’ workers in training make up 10% of the total number of learners who have been in training with the BCITO.

The ‘older’ workers in training make up 10% of the total number of learners who have been in training with the BCITO.

The ‘older’ workers in training make up 10% of the total number of learners who have been in training with the BCITO.

The ‘older’ workers in training make up 10% of the total number of learners who have been in training with the BCITO.

The ‘older’ workers in training make up 10% of the total number of learners who have been in training with the BCITO.

The ‘older’ workers in training make up 10% of the total number of learners who have been in training with the BCITO.

The ‘older’ workers in training make up 10% of the total number of learners who have been in training with the BCITO.

The ‘older’ workers in training make up 10% of the total number of learners who have been in training with the BCITO.

The ‘older’ workers in training make up 10% of the total number of learners who have been in training with the BCITO.
The Ministry of Business, Innovation and Employment (MBIE) has noted that flexible work arrangements are becoming more important in workplaces in New Zealand.

This has arisen in answer to the increasing needs of employees (especially women) to achieve a balance between their work and other commitments, including childcare or care of other family members. www.dol.govt.nz/er/bestpractice/worklife/flexiblework. Note: This is also the main driver for workforce participation in the MIWA report.

Attracting women of all working ages to construction jobs will require better information, targeted recruitment, and flexible work.
What the BCITO database tells us:

Characteristics of older BCITO learners - 40-49 years

There were 980 learners within this age group, for the 2007-2010 sign up period, and not unexpectedly this is the largest group for the older learner analysis.

- There were 14 female learners – all but one from the North Island. As noted above the Christchurch rebuild has had very little impact on female participation figures
- Of these learners there were three from five withdrawals from training in carpentry, with specialist trades faring much better at seven from nine completions

Prior educational achievement – 40-49 years

The largest group of learners with secondary school qualifications has NCEA Level 1, but it is difficult to state how many learners have no prior school qualifications due to the large number of not known replies appearing in training agreements. (See statistics below)

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCEA L1</td>
<td>174</td>
</tr>
<tr>
<td>NCEA L2</td>
<td>69</td>
</tr>
<tr>
<td>NCEA L3</td>
<td>39</td>
</tr>
<tr>
<td>No formal school</td>
<td>109</td>
</tr>
<tr>
<td>qualification</td>
<td>5</td>
</tr>
<tr>
<td>Not known</td>
<td>584</td>
</tr>
<tr>
<td>University Entrance</td>
<td>5</td>
</tr>
</tbody>
</table>

To succeed ...or not ...

57% of learners in the 40-49 year age group achieved their qualification with 2% still actively engaged in training. This is of concern, as the success rate for all BCITO apprentices in training is approximately 79%.

- 41% have withdrawn from training within this period of time.
The majority of learners – nearly 2/3rds have been undertaking the carpentry qualification.

- Concrete Qualifications participation total is 16%, although there are a high proportion of withdrawals from training – see next page for details.

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>British/Irish</td>
<td>3</td>
</tr>
<tr>
<td>Chinese</td>
<td>13</td>
</tr>
<tr>
<td>Cook Island Maori</td>
<td>1</td>
</tr>
<tr>
<td>Dutch</td>
<td>1</td>
</tr>
<tr>
<td>Fijian</td>
<td>2</td>
</tr>
<tr>
<td>Indian</td>
<td>8</td>
</tr>
<tr>
<td>Korean</td>
<td>2</td>
</tr>
<tr>
<td>Maori</td>
<td>91</td>
</tr>
<tr>
<td>NZ European/Pakeha</td>
<td>717</td>
</tr>
<tr>
<td>Other Asian</td>
<td>4</td>
</tr>
<tr>
<td>Other European</td>
<td>2</td>
</tr>
<tr>
<td>Other Pacific Islanders</td>
<td>33</td>
</tr>
<tr>
<td>Other</td>
<td>12</td>
</tr>
<tr>
<td>Other South East Asian</td>
<td>1</td>
</tr>
<tr>
<td>Samoan</td>
<td>4</td>
</tr>
<tr>
<td>Tokaauan</td>
<td>2</td>
</tr>
<tr>
<td>Tongan</td>
<td>1</td>
</tr>
</tbody>
</table>

European/Pakeha make up 80% of sign ups. Maori total 10% and Pacific Islanders approximately 5%.
<table>
<thead>
<tr>
<th>Course</th>
<th>Active</th>
<th>Completed</th>
<th>Withdrawn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concrete Core Skills</td>
<td>34</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Health &amp; Safety</td>
<td>11</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Concrete Construction</td>
<td>3</td>
<td>26</td>
<td>42</td>
</tr>
<tr>
<td>Concrete Production</td>
<td>2</td>
<td>11</td>
<td>22</td>
</tr>
<tr>
<td>Floor &amp; Wall Tiling</td>
<td>1</td>
<td>52</td>
<td>8</td>
</tr>
<tr>
<td>Frame &amp; Truss</td>
<td>24</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Plasterboard</td>
<td>2</td>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td>Precast Concrete</td>
<td>1</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Specialist interiors</td>
<td>11</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Carpentry</td>
<td>10</td>
<td>354</td>
<td>281</td>
</tr>
<tr>
<td>Fibrous Plaster</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>PPCS</td>
<td>12</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Solid Plastering</td>
<td>6</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Fibre Cement Linings</td>
<td>3</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

**Why the poor outcomes?**

Although the construction industry as a whole has a high proportion of workers without prior secondary school qualifications, and many learners achieve through a combination of determination and good support systems, this group of learners has very low levels of educational achievement (although some assumptions have to be made because of the lack of true data – the ‘not known’ entries in the BCITO data base).

Research both in New Zealand and overseas notes significant barriers to successful participation from lack of previous educational attainment.

**Longitudinal studies confirm that previous educational attainment is the single most important predictor of successful participation.** Further, a recent study (Gorard et al., 1998) of over 1,000 adults in South Wales argues that lifetime patterns of participation can be accurately predicted before individuals reach school-leaving age. The study identifies five key determinants of an individual’s learning trajectory: Age, ethnicity and migration pattern, gender, family back and finally their experience of initial schooling.

These factors are more significant than the current barriers people face, such as cost or domestic responsibility.

Furthermore participation and success in learning is the result of a chain of responses to both psychological (internal) and external variables – self-evaluation; attitude to education; importance of goals and expectation that participation will meet them; life transition; opportunities and barriers; and information about education.


What this means is that there could be literacy and numeracy issues at play, bad experiences from school, lack of confidence in the ability to learn through past experiences.

There is the need to actively mentor, partner and engage these mature learners in both learning goals and skill setting within a formative assessment model to ultimately achieve better outcomes.
Characteristics of older BCITO learners – 50-59 years

- Majority are male, with only 7 female learners
- Both female carpentry learners withdrew from training, but the rest achieved in specialist trades

- There is a variety of ethnicities, although 75% are NZ/Pakeha
- 10% are Maori learners

Low achievement for Maori learners in 50-59 age group

The Maori learners in this age group did not fare well in the success stakes. These learners enrolled in a number of trades, specialist and carpentry. Four from six learners withdrew from training in Concrete Core Skills, and only two from six learners achieved in carpentry. Specialist Interiors and Solid Plastering learners both achieved their qualification but there were no successes in Concrete Production, or Floor and Wall Tiling.

In contrast the other Pacific Island learners all achieved their qualifications (individually) in Concrete Core Skills, Frame and Truss, Solid Plastering and Carpentry.

With the BCITO Maori Strategy in place, and active participation in initiatives (both government and local) to engage and support Maori in vocational training and learning, as well as research into effective strategies for Maori engagement, achievement rates will hopefully improve in the future.

For current research refer to: Māori learners in the workplace setting Ako Aotearoa publication, March 2013
Prior educational achievement – 50-59 years

- There are more learners with secondary school qualifications – 35 with NCEA L1, 19 NCEA L2 and 2 with NCEA L2, although there is an overwhelming majority of unknowns.

Approximately three out of every five learners (61%) in the 50-59 year age group achieved their qualification.

Note: The success rate for all BCITO apprentices in training is approximately 79%.

A better outcome...

The success rate for this age group is slightly better than for the younger ‘older’ learners. Although it is difficult to make assumptions, it could be that the focus for these learners is not so much on ‘bringing up a family’ commitments, with more energy being put into career upskilling as a result.
Key issues to training older workers...

The ageing workforce literature identifies three key issues related to training older workers:

1. access to training;
2. adjustment of training methods and the learning environment to meet the needs, preferences, and learning styles of older employees; and
3. manager awareness training.

Characteristics of older BCITO learners – 60-69 years

This group of learners was the most successful with 12 from 16 (75%) completing the carpentry qualification.

- All male, NZ Pakeha
- The majority completed the carpentry qualification in less than 4 years, through a form of experience recognition – the BCITO ERP process
- Most learners had no prior educational qualification. Only 2 learners had the equivalent of NCEA Level 1 and one learner achieved the bursary qualification
- The 68 and 69 year olds both withdrew from training – one from specialist trades and the other from carpentry
Myths and realities...

...of ageing workers in New Zealand

“It is critical that all employers understand changing workforce dynamics and respond positively to them to maximise good employment outcomes”.

Quote by: Peter Townsend, Chief Executive, Canterbury Employers’ Chamber of Commerce
While there has been a slow recognition of ageing workers by informed stakeholders, this has not been accompanied by a changing national view.

Change is needed in the New Zealand mind set about the value and retention of older workers and the benefits, opportunities and challenges of mature job-seekers.

As well as addressing stereotypical assumptions about older workers the change in public attitudes must also embrace new thinking by individual employees about their specific needs, retention and how to stay employable.

A national campaign to help change the national mind set about work at older ages, which incorporates a discussion about what “old” is to help change the culture of early retirement has been suggested for the United States and Australia. Similarly the need for a seismic shift in public attitudes exists in New Zealand.

While older workers are included as one of many groups making up the workforce in tri-partite relationships working on issues such as productivity and flexible work, they are not a separate focus. This reduces the potential for consensus building about specific older worker initiatives by the social partners.

The UK Employers Forum on Age provides an impetus to the “business” of older workers and deserves to be considered in the New Zealand context.


For UK Employers Forum refer to:  http://www.efa.org.uk/publications.php?action=search&category=8
How to extend New Zealanders’ working lives

Main resource: Older Workers: Challenging Myths and Managing Realities Research and analysis by Dr Mervyl McPherson EEO Trust 2012

Adopt an integrated approach
Overcoming the pressures that work against attracting and retaining older workers requires an integrated response from government and employers.

Challenge myths and change attitudes
The talents of older workers risk being wasted due to false assumptions and stereotypes about their skills and performance. Among the most pernicious of these is that older workers cost more, are more prone to health problems, can’t adapt to workplace changes and new technology, perform more poorly than younger workers, and represent a poor return on training investment.

Dealing with age discrimination – despite the human rights legislation and the legal remedies available, employer attitudes are often still a barrier. In building firms (SMEs) the nature of the industry, culture, philosophy and work practices do not lend themselves to conducive work practices such as flexitime, phased retirement and job sharing. In a recent survey in New Zealand, 46% of employers and 32% of employees stated that age discrimination is a problem.

The research is clear that perception based stereotyping exists and needs to be addressed. Despite the human rights legislation and the legal remedies available - the Positive Ageing Strategy, Employment Relations Act (2000) and provisions of the Human Rights Act 1993 which provide protections to employees from such age related discrimination, employer attitudes are often still a barrier.

For an organisation (in large construction firms for instance) intent on establishing a Positive Ageing policy, it has been suggested that they provide staff and management training as a useful first step in re-tuning their workforce attitudes to older workers.


Current and future cohorts of older workers will be healthier and fitter than those of generations past, as well as better educated, more familiar with technology and likely to have longer working lives. However, there is still a need to identify and accommodate those who are disadvantaged.

Anecdotal evidence of construction workers in New Zealand is that productivity and skill is not hampered by age – when the will and drive to accomplish a good day’s work is present. Younger cohorts of workers are becoming business owners, from ages mid 20s upwards, and older workers are staying in the industry – often in supervisory or management roles, but also in the more physical roles when necessary.
Communicate the business benefits of mature workers and provide positive role models

Employers can demonstrate their belief in the value of mature workers by providing exposure to role models that do not fit stereotypes, as well as informing workforces on the business benefits of older workers. These benefits may include older workers’ lower turnover and absenteeism, their reliability, commitment, experience, life experience and people skills – the latter two points are particularly helpful for companies wishing to engage with an ageing and relatively affluent consumer market.

Adopt a life-long learning approach

It is widely agreed that a lifelong-learning approach is necessary to ensure workers’ skills remain relevant as they age.

Provide flexible working arrangements

Virtually all the research on attracting and retaining older workers notes the need to provide flexible working arrangements, such as flexible or reduced hours, extended leave and carer’s leave, phased retirement, special projects, and home-based working. These are key ways in which older workers can continue to work while balancing health needs, caring responsibilities and lifestyle preferences. Some research indicates a need for more attention to the implementation and mechanisms of such flexibility policies.

OVERSEAS EXAMPLE

Business Link - choose the right type of flexible working (UK)

www.businesslink.gov.uk

This is a web-based interactive tool for employers to get advice on what might be the best flexible work arrangements for their particular circumstances. The site also includes other resources on flexible work for employers.

In a Department of Labour discussion document INCREASING AVAILABILITY AND TAKE UP IN NEW ZEALAND

Discussion paper, Department of Labour Cath Edmondson, Workplace Practices November 2006 the need to increase productivity in the workforce, and the possibility of government legislation being brought into effect for how flexible work is to be managed in the workplace, led to the Transport and Industrial Relations Committee of Parliament asking the Department of Labour to consult widely on mechanisms to deliver flexible working hours. This led to the Employment Relations Amendment Act 2007 and the 2011 review of the Act (see below from the website).

The department worked with the business sector, unions and workplace leaders to come up with practical ways to introduce and manage flexible work in workplaces. (See example from document below)

Question 6 Dealing with quality flexible work: Do you think different types of employers, types of work or workplaces, or occupations face particular challenges in providing for quality flexible work? What are these challenges? What is needed to meet these challenges?

Individuals and organisations agreed that different employers, workplaces and occupations face different challenges for example customer/client focussed services, production, seasonal activities. In general respondents were largely positive that flexible work can and should be achieved. There was, however, less support from organisations than from individuals for this to be achieved by legislating for a right to request flexible work.
Different approaches would be needed to suit such variables as the business hours, customer base, services provided, type of sector, types of workers and recognition of the individual/team interactions within the business. The extent to which the composition of the workforce is fulltime, part-time, casual/seasonal, were also stated as factors influencing the level of flexibility, and the acceptance of it. Overall, the responses from organisations were largely positive that flexible work can and should be achieved.

The range of challenges raised by respondents in the discussion document includes examples which could relate to the construction industry in New Zealand are:

- companies that have deadlines to complete work for example construction and road building industries
- businesses of a process nature or who operate on tight margins
- team positions requiring safety and security cover
- a person employed in a sole-charge position, for example sole charge retail manager; or a manager who must be at work to supervise others, for example building site foreman

In relation to business size respondents felt that small business may have less opportunity to be flexible for example costs associated with having additional staff to allow for flexible hours can be prohibitive to many smaller employers. However flexible work was easier to manage in a small firm. In large organisations flexible work may be more difficult to manage, but it should be easier to provide cover and there is potential for more options to be available. *This is especially true of small business owners (such as construction firms) who can schedule work timetables and therefore may be able to allow greater flexibility for themselves and the small number of employees who work for them.*

In the construction industry there may not be much understanding or tolerance of family issues. There can be set hours of operation when all trades are available.

The key themes from organisation responses are largely consistent with those from individuals. The vast majority of respondents agree that different employers, workplaces or occupations faced particular challenges in providing quality flexible work.

There is general agreement about the uniqueness of workplaces and therefore there is no one-size-fits-all solution. Many of the challenges depend on the type and size of the business, the employees, managers, the geographical strengths of each in terms of knowledge, experience and physical capacity.

**Meeting the challenges**

In the discussion document (Department of Labour) the majority responded that an industry/sector approach and development of specific best practice guidelines to suit each sector would be the most effective way to promote greater understanding and implementation of flexible work options and to deal with issues particular to the sectors.

It should be noted, however, that in a recent survey of New Zealand firms (2012) only 18% of employers have specific planning strategies around the aging workforce participation.
The Employment Relations (Flexible Working Arrangements) Amendment Act 2007

Before the Act came into force in July 2008, we knew that many employers already offered their staff flexible work. But for some employees and managers the prospect of discussing flexible work without a clear process can be daunting. The Employment Relations (Flexible Working Arrangements) Amendment Act 2007 gives employees with caring responsibilities a statutory right to request flexible work. The Act has changed the way some employees and employers make and respond to requests for flexible working arrangements.

**What are the changes?** The Act provides certain employees with the right to request a variation to their hours of work, days of work, or place of work. To be eligible for the ‘right to request’ an employee must have the care of any person and have been employed by their employer for 6 months prior to making the request. When making the request, the employee must explain how the variation will help the employee provide better care for the person concerned.

The Act requires employers to consider the request for flexible working arrangements and provides the only grounds upon which they can refuse a request. The Act provides a process for how requests are to be made and responded to and also provides a process for resolving disagreements relating to a request for flexible working arrangements which may arise from time to time.

A review of the Act was completed in 2011 and the report of the review can be found online.

Other solutions identified as being relevant for the older worker included: More labourers; more direct labour; pay by day rate; shorter working hours; reorganising the way the work is carried out; flexible working patterns; loading out gangs; self-selection; provision of medical care such as osteopaths; work rotation systems to avoid repetitive exposure; improved sick pay; and company partnering. Source: Understanding the Older Worker in Construction Joanna Leaviss, Alistair Gibb and Phil Bust, A Strategic Promotion of Ageing Research Capacity initiative, January 2008

**Offer health and wellness programmes**

Offering health and wellness programmes and medical checks are recommended in order to help maintain the performance and productivity of an ageing workforce.

**Adopt an age-neutral approach to management, policies and practices**

Audit company policies and procedures through an age lens, considering recruitment, training, performance management and promotion. Employers should ensure practices and decisions are based on individual needs and abilities, not age, location and the workplace culture.

**Raising management skill levels in the sector**

A skill that has been in huge demand in the building and construction sector and in the economy more widely in recent years is management capability. People with management responsibility need to have the skills to effectively manage for businesses to operate effectively and respond to changes and fluctuations. There has also been a shift in thinking away from seeing management as an innate ability or something that can be learned by observation to a skill which can be studied and which needs to be practised. Specific management skills that are in short supply include: business management, supervisory, project management and HR skills. These are especially important to ensure that workers are productive and used efficiently. The sector needs to ensure that the benefits of management training are understood by firms and workers, and that training is available that effectively meets the needs of current and future managers.

Quoted from: Construction Productivity Partnership (NZ)
Physical demands

Some jobs are physical and always will be so, requiring strength, resilience and stamina. However, organisations are becoming increasingly smart about reducing or managing these physical demands so they reduce the risk of injury and physical burnout whilst being more likely to retain the experience they need. People are then able to keep on doing the job as they age without the personal costs. Techniques used by these organisations include:

• Increased use of equipment
• More effective training on techniques for doing the work in a less physical way
• Increased safety measures
• Better pacing of work and use of breaks
• Planning work to spread the physical demands
• Giving workers longer periods to recuperate
• Using teams to carry out work so the load can be spread and the specific skills of individual team members better utilised
• Getting older workers to undertake more maintenance or planning work, where their experience and problem solving can be utilised with reduced physical demand
• Pairing older workers with younger workers, who can learn from the older worker’s experience, whilst shouldering a greater burden of the physical demands.

From: Valuing Experience. A practical guide to recruiting and retaining older workers  EEO Trust September 2008, page 18
...there is no distinct connection between age and work performance. Numerous studies show that older employees are as productive and skilled as young...”

“Population ageing will continue to intensify the challenge for New Zealand to become more adept at harnessing the skills of an older workforce. Achieving this will bring about important gains in overall productivity levels and workplace performance.”

Understanding the job mobility and employability of older workers. Workforce 2020 Ageing Workforce. Department of Labour 2009, p19

Skills acquired and relationships formed as long ago as the 1960s amongst Māori trade trainees in Christchurch are flourishing in the form of a unique cooperative launched recently to help rebuild the city.

Te Kaihanga Cooperative Limited is possibly the world’s first Māori trade/commercial cooperative company. Its members/owners are 15 Christchurch tradesmen; all graduates of a Māori Trade Training Scheme from the 1960s-90s. The builders, block layers, plasterers and drain layer are licenced practitioners who came together to work on the Christchurch rebuild and other construction projects.

The Cooperative takes its name from one of the old Te Kaihanga Māori trade training hostels where many of the men undertook their initial training. Over the years, the old boys have built strong relationships; working together, playing sports and meeting socially.

The Minister of Māori Affairs Dr Pita Sharples expressed his delight at the formation of this cooperative. “I am overjoyed that the fruits of the trade training schemes from the sixties and seventies have endured and will help nurture the families of Christchurch”. “These men have trained, worked and built up their own businesses and now they are giving back to their own people by training them, helping them into work and rebuilding their city.”

Te Puni Kōkiri Regional Director David Ormsby says the “old boys” all remained in Christchurch since their initial Māori trade training days and are successful businessmen now.

“They’re preference is to concentrate on the rebuild of Christchurch homes. They recognise that this city gave a lot to them in the past and they want to give back,” David Ormsby says. Te Puni Kōkiri’s Te Waipounamu office provided brokerage and investment support for project facilitation and legal advice.

“Some of the latest information from the Canterbury Earthquake Recovery Authority tells us that an additional 23,871 construction workers will be required with a peak demand for labour occurring around the fourth quarter of 2013,” David Ormsby says. According to CERA, this is not a short term, boom and bust dynamic either.

“They’ve told us that the build-up of construction related activity will take more time than most commentators are projecting and the tail of past peak demand will create additional work for the next 20 years.” The vision for Te Kaihanga Cooperative includes harnessing Māori potential and enabling Māori tradesmen to tender for, manage and deliver large building projects in the rebuild of Canterbury and providing training and employment opportunities for rangatahi Māori wanting to enter the building and construction area.

Discussion, Implications and future research questions:

This research has shown that older workers in the construction industry want to remain in their jobs, but although their skills, experience and commitment are valued, there is often a trade off between that and physical fitness.

Employment tenure is thought to impact on ill-health and early retirement, and has been found to be one of the most important issues affecting older workers in the UK study. It is therefore worthy of further investigation and questions which could be addressed in the future include:

- Does employment tenure, such as subcontracting, predict ill health and early retirement?
- If employment tenure does have an effect on the health and well-being of construction workers, what measures can be taken to redress the balance?

Preventing older workers from retiring early from the construction industry has financial implications and it is unclear what happens to workers who do retire early because of ill health.

Further study is needed to identify the proportion of these workers that transfer to another type of work due to ill health, and the proportion do not rejoin the workforce at all.

Since many workers are self-employed, it could be that this cost of losing a member of the workforce is often met by the health and welfare system. In New Zealand some of the largest claims are from the older workforce – particularly trades workers in physically demanding work such as the construction sector.

However, there are financial costs for larger construction companies in order to make the workplace less hostile to the older workers. In such a competitive industry there may be little incentive for them to bear these costs, as the current influx of migrant workers means that older workers can be easily replaced. It is not known whether the migrant workers which replace the older workers have the same skill level and experience as those who leave, especially as a considerable number of workers are flowing into Christchurch, in particular, as the rebuild gains momentum.

The expansion of the Health and Safety Regulations is something which should be explored as one way to enable older workers to stay in the industry longer.

Interventions targeted at persuading all workers to follow safe practice can help to prevent work related injury and ill-health in the long-term, thereby extending working life. For any targeted intervention to be successful, tools and equipment to enable workers to take personal responsibility would need to be readily available.

There is a general acceptance within the construction workforce that injury and ill-health go hand-in-hand with the job and it is unlikely that the construction industry could ever be 100% safe; but it should be the aim of both trainers and health and safety managers to ease the physical burden of the work wherever possible. This may involve detailed task analyses and collaboration with designers of construction tools and equipment in order to create a demand for appropriate aides.

Intervention at all levels of the industry is likely to be most effective in creating a favourable environment for the older worker in construction.

Source of discussion from: Understanding the Older Worker in Construction Joanna Leaviss, Alistair Gibb and Phil Bust, A Strategic Promotion of Ageing Research Capacity initiative, UK January 2008