

## LABOUR MARKET WORKSHOP BRIEF

# CHRISTCHURCH ECONOMIC DEVELOPMENT STRATEGY (CEDS)

WORKSHOP: 3 May 2016

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### PURPOSE

The purpose of the CEDS Labour Market workshop is to consider what we need to do to ensure Christchurch has the workforce it needs now and into the future.

This briefing paper brings together existing statistics, international and national research to stimulate thinking prior to the workshop. The paper is not designed to provide answers – that's for the workshop.

Refer to Appendix 1 for an overview of CEDS 2013 and Appendix 2 for a list of CEDS 2013 projects pertaining to this theme.

### LABOUR MARKET KEY INSIGHTS – SUMMARY

- The labour market pressures of the rebuild have not impacted the rest of the economy as significantly as initially thought.
- Transitioning labour from the rebuild will be challenging – over 30,000 workers transitioning out of the construction-related employment by 2020.
- Labour market factors affecting the growth of Christchurch businesses and sectors include:
  - An ageing population
  - Increasing global competition for skilled labour from cities and businesses
  - Rapidly changing technology increasing the skills requirements across sectors
  - Responding to the changing nature of work and expectations of workers
- Small and medium-sized enterprises (SMEs) often lack the skills and resources to invest sufficiently into human capital development and retention.
- The nature of learning is changing.

### SOME QUESTIONS IN PREPARATION FOR THE WORKSHOP

1. What are the immediate labour market challenges facing the Christchurch economy?
2. Do any of these need a targeted / urgent response?
3. What does Christchurch need to do to respond to long-term issues?
4. Who needs to be involved?
5. What is most urgent, important to do?

## WHY IS THE LABOUR MARKET IMPORTANT FOR ECONOMIC DEVELOPMENT?

To achieve economic growth goals Christchurch needs to ensure its supply of labour can match demand (labour market equilibrium). The road to achieving this labour market equilibrium is affected by a range of macro factors:

- Rebuild peak and contraction
- An ageing population
- The influence of technology
- The ease of mobility of workers
- Economic shocks like recessions

Christchurch and Canterbury have strong economic growth potential for the medium-long term. However, this may be constrained by low population growth due to low birth rates coupled with an ageing population. Historically, economies have relied on underlying population growth to grow GDP through demand for goods and services and the supply of workers, complimented with technology and productivity gains. However, with annual population growth projected at 0.7% for Christchurch (0.9% for Canterbury) over the next 16 years, achieving historic GDP growth levels of 2.3% per annum for Christchurch (2.7% for Canterbury) will rely on significant gains in productivity and migration, above historic levels.

With skilled workers in great demand globally, the region needs to build systems and services which support the development, retention and better utilisation of skilled people alongside a focus on attraction.

**A draft CEDS background paper** (link [here](#)) contains further information and statistics about the Christchurch labour market, and is provided for further reading if desired.

## LABOUR MARKET – OPPORTUNITIES & CHALLENGES FOR CHRISTCHURCH

### **The region's population has recovered quickly from the earthquake**

Following the 2010/11 earthquakes up to 7,500 people left the city (2.5% of the total population).<sup>1</sup>

The population of Canterbury recovered to pre-earthquake levels in 2014. However, a significant movement of people out of Christchurch into the Canterbury region means that the population within Christchurch City is not expected to reach pre-earthquake levels until 2020.

### **Labour market pressures from the rebuild have been handled well**

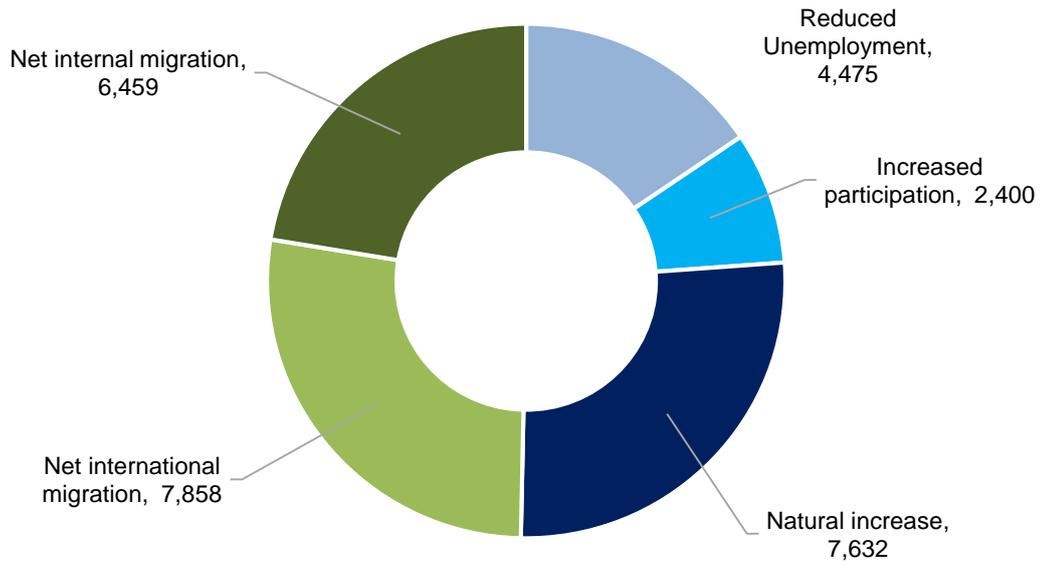
The region's workforce expanded by approximately 28,000 workers for the rebuild. Approximately 50% of this was facilitated by greater utilisation of the local population (natural population growth, higher workforce participation and lower unemployment) and 50% through migration of workers from outside the region and New Zealand. The responsiveness of the local labour market and flexible migration policies have meant that wage inflation, particularly in the construction sector, has been lower than anticipated.

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<sup>1</sup> Internationally, similar sized cities that have experienced 2.5% depopulation after a disaster took over 10 years to return to pre-disaster levels. Hurricane Andrew – two years after event only 0.2% of population had moved out of North Dade, 6.5% of the population moved out of South Dade (worse hit). Kobe – 100,000 left city permanently or 2.5% of total population, and Kobe took ten years to return to pre-disaster levels of population.

### Sources of growth in Canterbury labour force 2010-2015

Source: StatsNZ, Westpac, CDC



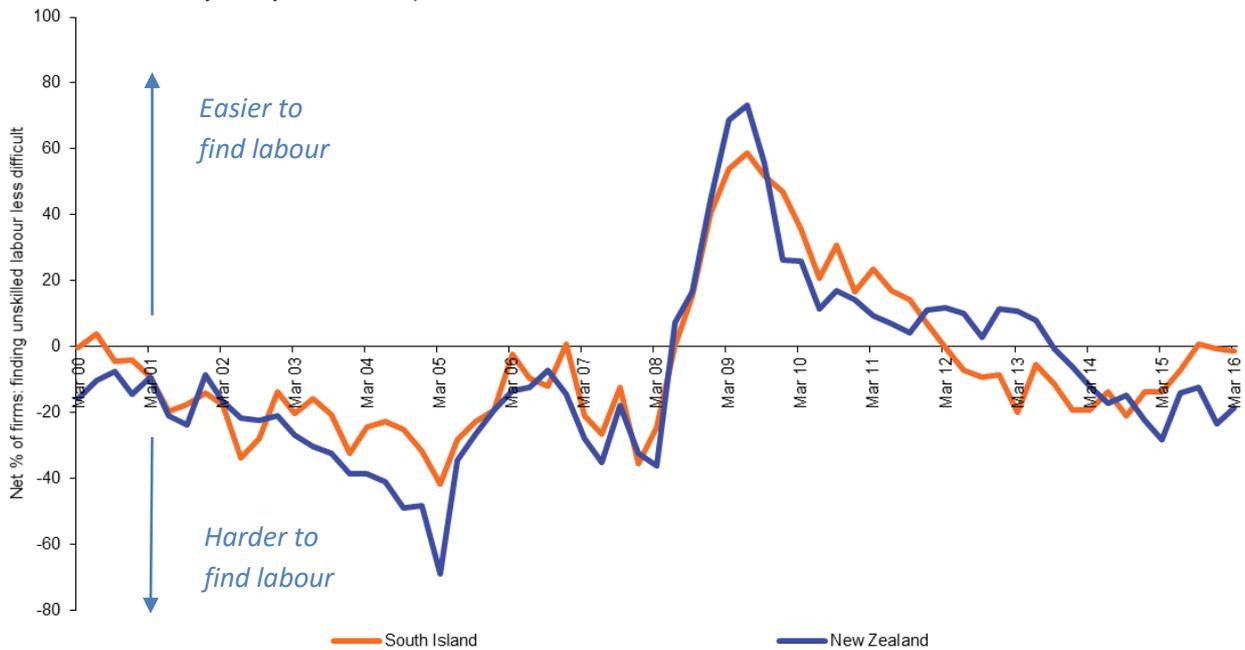
Other industries employing lower-skilled workers have found it challenging to maintain their workforce while the construction sector has paid higher wages. A number of initiatives have helped to control wage inflation in the face of extreme labour demand – some which are detailed in Appendix 2.

As the rebuild reaches a plateau level of activity, businesses in other sectors will be finding it easier to find both skilled and unskilled labour in Canterbury. The NZIER Quarterly Survey of Business Opinion indicates that South Island businesses have found both unskilled and skilled labour easier to find in 2015.

### Unskilled Labour

Net percent of firms reporting decreased difficulty finding unskilled labour

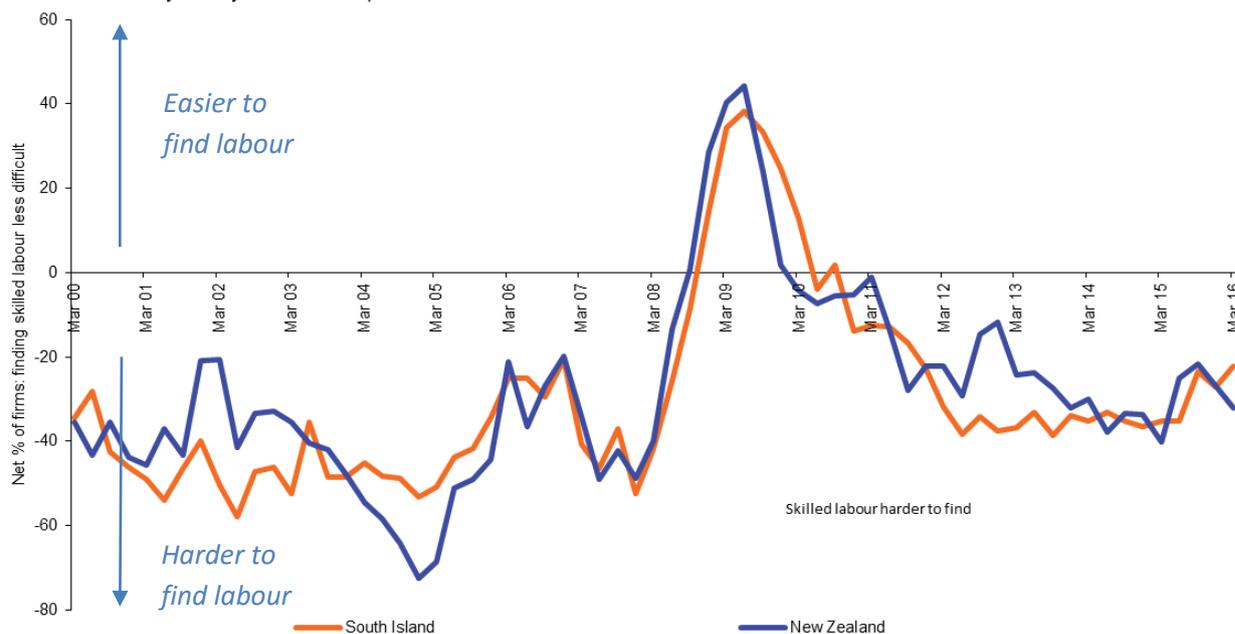
Source: NZIER Quarterly Survey of Business Opinion



## Skilled Labour

Net percent of firms reporting decreased difficulty finding skilled labour

Source: NZIER Quarterly Survey of Business Opinion



## Transitioning from the rebuild will have its challenges

Based on rebuild progress to date, 90% of the rebuild will be completed by 2020, with an elevated level of activity (plateau) expected through until 2018.

The 30,000 jobs created from the rebuild are expected to reduce as rebuild activity subsides. It is estimated that 15,000 of these workers were already in the Canterbury region, and are more likely to remain in the region than those who have migrated from elsewhere in New Zealand and overseas.

Workers may transition out of the construction sector in a number of ways:

- Some workers employed in the construction sector have transferrable skills e.g. accountants, project managers, truck drivers, and will be employed in other sectors.
- Some workers have postponed life stages such as retirement, tertiary study, and raising a family to take advantage of rebuild opportunities, and will move back to these life stages when employment demand eases. This will result in the labour force participation rate falling back from current levels of around 74% towards the national average of 69%.
- Some migrant rebuild workers are inherently mobile, and will move on to their next career opportunity elsewhere. Those that gain New Zealand residency from their time in Canterbury may use this to move to Auckland to join that growing construction sector there.
- Canterbury and Christchurch are expected to experience an increase in the unemployment rate, particularly in the short-term, as potentially more workers will be seeking alternative employment than there are jobs (with skill matches) available.
- Some workers may undertake transitional training to enable a transfer into alternative employment.

We cannot estimate the magnitude of these different transition pathways and therefore the impact on unemployment, availability of skilled workers for other industries, demand for tertiary education, outward migration.

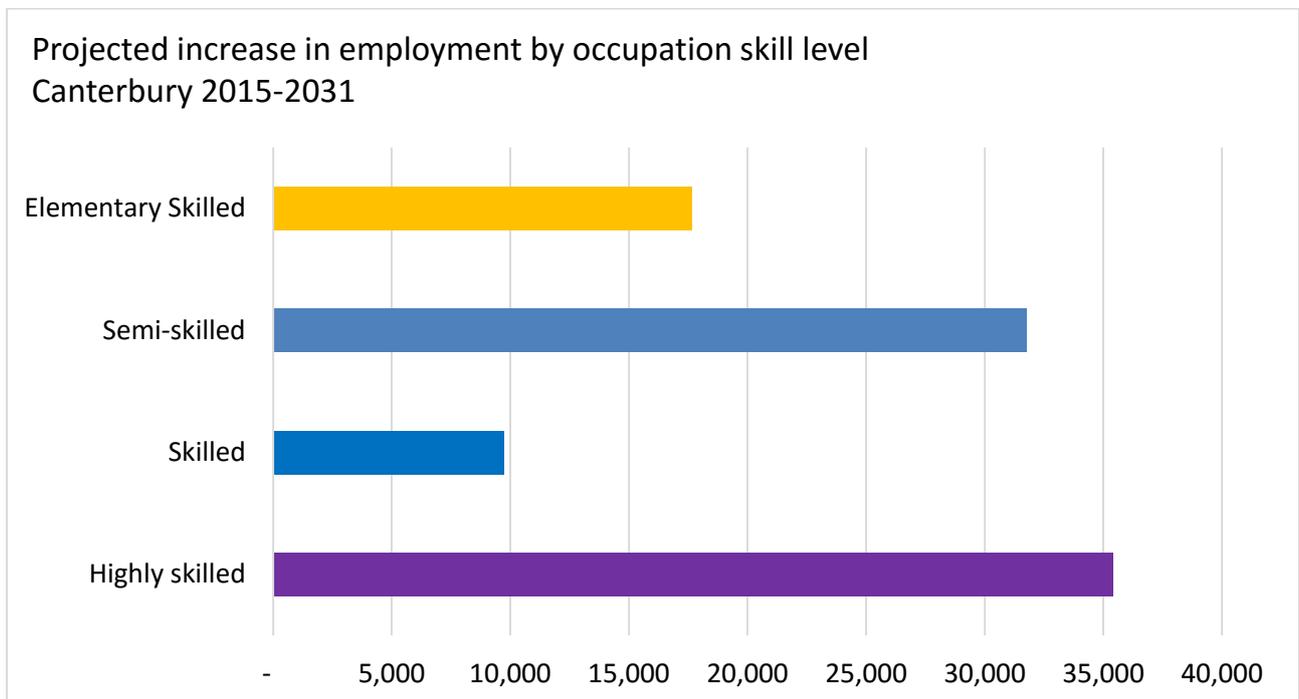
**Beyond the rebuild, maintaining a sufficient workforce will be a challenge**

Based on historic economic growth rates, projections to 2031 indicate that buoyed by the post-earthquake recovery and investment in high growth sectors, the Christchurch economy should grow by 2.3% per annum (2.7% across Canterbury).

However, this medium to long term outlook for the region will be constrained by population. With an ageing population, 72,500 workers are projected to retire by 2031. Meanwhile, 93,500 secondary and tertiary students are projected to transition into the workforce – sufficient to replace retiring workers, but insufficient to fill the additional 94,500 new jobs projected to result from economic growth at historic rates. The modelling work suggests that while this will impact across all sectors, agriculture; manufacturing; professional, scientific and technical services; and healthcare and social assistance are expected to require significantly more workers as these sectors face considerable growth and retirement.

At historical growth rates (pre-earthquake) Canterbury will have 167,000 new vacancies and only 93,500 entering the workforce from the education system by 2031.

New job creation over the next 16 years is expected to be concentrated in highly skilled occupations, which generally require degree-level qualifications – for example a manager or business professional; and, semi-skilled occupations – for example a tour guide, barista or police officer, typically with a certificate level qualification. Examples of a skilled worker would include an electrician or chef, typically with a diploma.



Longer life expectancy will lead to workers remaining in the workforce for longer and therefore increasing the average age of the workforce. The proportion of the workforce aged 65 and over is expected to grow from 7% to 12% by 2031. The percentage of the 65-69 year old population participating in the workforce is expected to grow from 38% to 59%; the 70-74 year old population from 18% to 32%; and the 75-79 year old population from 11% to 22%. This trend of later retirement will help buffer labour shortages and retain

experience and institutional knowledge in sectors, however new workers will still be needed when they retire.

Overall workforce participation rates is not expected to drop significantly below the recent average of 69% provided sufficient younger workers migrate into the region to counterbalance older workers retiring. CDC estimates that to maintain historic economic growth, Canterbury will require net migration averaging 6,600 people per year, above the historic average of 3,600 per year in the pre-quake period.

There are three ways the city and region can continue to grow in the context of a smaller working age population:

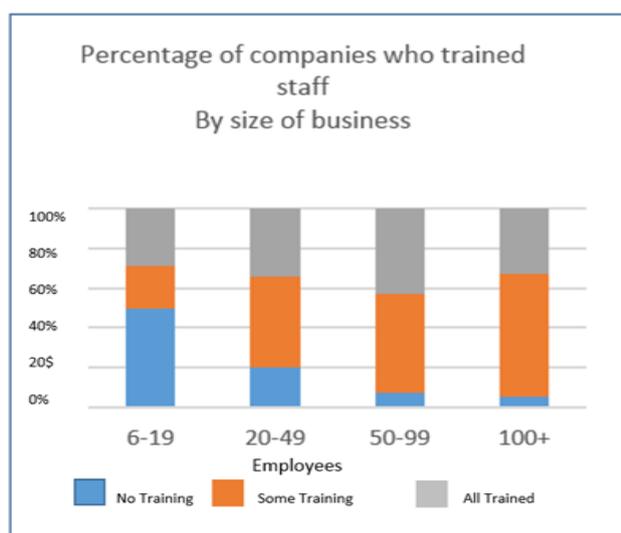
- Increase the productivity of workers through application of new technology, investment in capital and training, and improved businesses processes and management practices.
- Maintain or increase labour force participation rates through more flexible working arrangements to retain older workers, parents and others.
- Attract new workers from elsewhere in New Zealand and overseas (this will be addressed in the Attractive City Workshop on 10 May).

### Productivity improvements have a key role to play

Labour supply constraints are expected to push up labour costs and lead to increased capital and investment by businesses on workforce productivity initiatives.

New Zealand’s low labour productivity levels have in part, reflected a tendency to increase labour levels rather than invest in new capital, technology and training to increase labour productivity. This has been due to the relatively high cost of capital (due to New Zealand’s thin capital markets) and the relatively low cost of labour. When talent cannot be found in the local market, New Zealand businesses have preferred to broaden the search outside of the country, with only 17% considering training and development as an option compared with global companies, 25% of which provide additional training and development to existing staff to grow from within<sup>2</sup>.

The dominance of very small businesses in the New Zealand economy may influence low levels of investment in training. A higher proportion of SMEs provide little or no training for employees compared to large businesses in New Zealand. Low levels of staff training can lead to vulnerability in times of change, limited ability to be innovative, and limited ability to adopt new technologies. Reluctance to invest in people development can be due to a lack of resource and money, a concern about losing on the investment if staff leave, or a lack of awareness of the benefits that people development can deliver.



<sup>2</sup> National Business Review, ‘, August 17, 2012

In workforce planning, it will be important to ensure that the mix of qualification levels within the economy are aligned to the needs of the business sector, changing complexity of knowledge intensity of the business sectors, and work types. Attracting skilled staff from overseas can be a useful option to manage short-term mismatches between the skills of the local population and needs of businesses.

Improving workplace productivity requires more than highly-qualified workers; there needs to be an understanding and alignment between the skill needs of industry and the skillsets of the workforce.

Research from the US Centre of Talent Innovation<sup>3</sup> has highlighted the benefits of increasing the diversity of the workforce to improve innovation and market share, as well as the more obvious benefits of expanding the potential workforce, for example when traditionally male orientated industries recruit more women. The research found that employees at publicly traded companies with a strong mix of both inherent diversity (age, gender, ethnic background) and acquired diversity (experience, global mind-set, cross-functional knowledge) were 70% more likely than employees at non-diverse publicly traded companies to report that their firm captured a new market in the past 12 months, and 45% more likely to report that their firm improved market share in that same time-frame.

The roll-out of Ultra-Fast Broadband (UFB) for Christchurch residents and businesses should reduce costs and allow more companies to connect and enjoy the increased productivity that faster connectivity provides (for example, being able to quickly adopt new technology, increased efficiency, and online collaboration). Productivity gains from UFB are expected to add \$770 million to regional GDP by 2031. The priority rollout to businesses, schools and hospitals is over 90% complete, and the overall rollout including houses is over 60% complete, and on track for completion in 2018.

### **Demand for more flexible working environments**

Technological advances, globalisation, shifting expectations of (older and younger) workers and new business models are changing the way the workplace is structured, increasing labour mobility and creating greater demand for flexible working arrangements. As technologies emerge and change, and as working lives lengthen, management styles, workplace cultures and training will change.

Technology is driving greater demand for highly-skilled workers, including managers and professionals. International case studies show increased demand in highly skilled occupations (e.g. managers and professional occupations) and skills associated with “knowledge work” (e.g. cognitive skills such as abstract reasoning, problem-solving, communication and collaboration).

An ageing population means demand for workers in unskilled occupations, which provide aged services or where the current working population is older, may also be strong, however automation in unskilled and potentially semi-skilled roles through disruptive machine learning technologies may threaten these roles.

### **Opportunities for those not currently in work**

The labour force has the capacity to grow by reducing unemployment and growing participation rates. This is currently supported by central government initiatives such as Youth Guarantee (fee-free vocational study for 16-19 year olds) and 20 hours free childcare (enabling parents to study or enter the workforce).

A challenge will be retaining youth in or completing education pathways when labour demand is high and globally cities are competing for labour, especially youth.

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<sup>3</sup> “Innovation, Diversity and Market Growth”, Centre of Talent Innovation, New York, 2013

## The nature of learning is evolving

Rapid change and disruptive technology means that learning is moving from a single secondary tertiary qualification model, to ongoing and life-long skills development.

STEAM (science, technology, engineering, arts and maths) skills are being identified as key skills across multiple sectors to enable businesses to respond and succeed in a technologically sophisticated and dynamic environment.

Although New Zealand performs well in international comparisons of educational achievement, these comparisons are based on quantity of skills, rather than the relevance of those skills to the country's economy. New Zealand appears to have a high rate of skills mismatch when compared with other OECD countries, as evidenced by a low earnings premium for tertiary qualifications.

Christchurch has a strong and diverse education sector, comprising public and private institutions from preschool to tertiary level. Christchurch is the tertiary education hub of the South Island, with competing institutes offering a wide range of courses and qualifications. There are two universities (University of Canterbury and Lincoln University); one Institute of Technology and Polytechnic (Ara Institute of Canterbury); Private Training Establishments (PTEs); Industry Training Organisations (ITOs); and community training programmes, as well as the University of Otago Christchurch School of Medicine. University of Canterbury is recognised for its research and programmes in Engineering and the Sciences, and Lincoln University in land-based research.

Online learning has expanded the breadth and depth of learning available. The wide choices of subjects, learning environments and online learning resources means students have a broad range of options, can study at any time, in a wide variety of subjects, within local and global learning communities. This provides greater choice for individuals and more options for businesses to access training provision. However, it also creates a higher navigation cost as the range of provision becomes more complex.

Rapidly changing technology and competitive global talent and education systems mean it is challenging for students, businesses and educators to anticipate what skills may be in demand in the future, and also for the education system to be able to anticipate and adapt quickly and appropriately to changing workforce requirements.

## OPPORTUNITIES AND CHALLENGES FOR THE LABOUR MARKET

The overarching labour market goal is to **enable labour supply to match demand** (labour market equilibrium) in terms of volume, education and productivity.

Supply of labour matches demand when business has the workforce it needs producing what business needs – now and into the future.

The themes, challenges and opportunities presented in the table below will be discussed during the workshop.

THEMES	CHALLENGES	OPPORTUNITIES
1. Manage the transition of people out of the rebuild	<p>Difficult to retain workers in Christchurch due to:</p> <ul style="list-style-type: none"> <li>• Lack of local employment opportunities because of the large number of rebuild related jobs</li> <li>• Skills mismatch</li> <li>• Global competition</li> </ul> <p>Flow-on issues from transition – higher unemployment rate and/or population decline, falling participation, greater demand on adult education providers</p>	<p>Meet skill shortages in the underlying economy by retaining rebuild workers with transferrable skills</p> <p>Greater availability of labour may aid business creation or expansion</p> <p>Redress fall in student numbers at tertiary institutions</p>
2. Retain skilled people	<p>Increasing competition for skilled labour on a global scale</p> <p>SMEs may lack the capability to attract, retain and develop skilled labour</p> <p>Christchurch and New Zealand are small economies on a global scale – lack of career opportunities</p> <p>Christchurch has, or is perceived to have, relatively low wages and a high cost of living</p>	<p>Growing knowledge intensive sectors would create more opportunities for skilled people</p> <p>Regeneration improves the quality of in the urban experience in Christchurch</p>
3. Develop and utilise people more effectively	<p>Businesses, educators, people don't know enough about global trends and future skill requirements</p> <p>Businesses, especially SMEs, underinvest in training and development</p> <p>SMEs may not have capability to deliver internal workplace productivity improvements</p> <p>The education system is finding it difficult to keep pace with the rate of change in the workplace</p>	<p>Growing online training provision means businesses / people have more choice about how to acquire skills</p>

## APPENDIX 1 – CHRISTCHURCH ECONOMIC DEVELOPMENT STRATEGY

CDC prepares and reviews the city’s economic development strategy on behalf of the Christchurch City Council. The Christchurch Economic Development Strategy (CEDS) was released in April 2013. It was updated in April 2014 to reflect project progress. Here is a link to the [strategy](#).

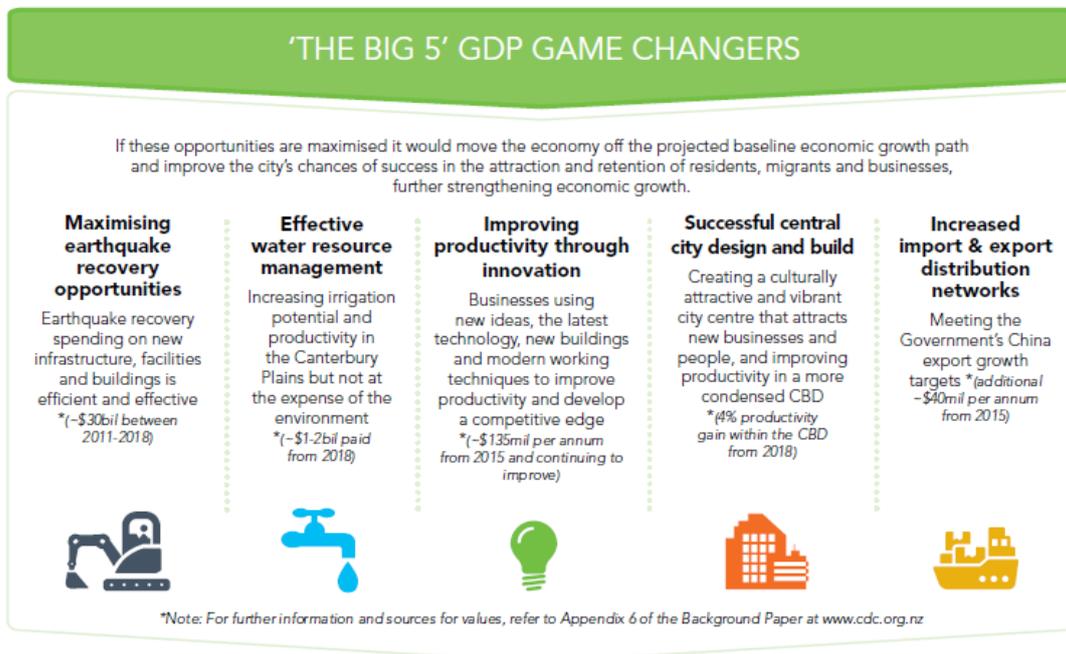
### VISION AND GOALS

The CEDS vision for the economy of Christchurch is that in 2031 Christchurch is recognised as the best place for business, work, study and living in Australasia.

To achieve the vision, by 2031 the goals of CEDS are:

- Christchurch has the best economic ranking against Tier Three cities in Australasia. Quality of living matches a Tier Two city in Australasia.
- Total GDP has grown by 54% to \$15.4bil (GDP per capita by 27%).
- Exports to China have increased by 140%, reaching \$719mil by 2031.
- In 2031, 20% of the working age population is employed in current high-growth sectors: High Value-Added Manufacturing; Technology; Professional Services; AgriTech and Health Research and Development.
- The proportion of the working age population with a post-high school qualification has increased from 40% to 45%. The proportion of the working age population with a Bachelor qualification or higher has increased from 20% to 26%.

The CEDS development process in 2012-13 identified five large-scale opportunities which have the potential to step-change the economy – ‘The Big 5’.



In addition, there is a longer list of development initiatives which are required to ‘Keep the City Competitive’ with other cities and regions.

## INITIATIVES THAT KEEP THE CITY COMPETITIVE WITH OTHER CITIES

Cities, much like organisations, need to find ways to continuously improve their operating environment to remain competitive and create periods of competitive advantage over other cities. Large step-changes in GDP are unlikely to result from these initiatives, but they are important in terms of retaining a competitive proposition for businesses and the labour force.

<p><b>Workforce</b> Addressing the ageing population, developing solutions for local labour and skills shortages and increasing workforce productivity</p> 	<p><b>Supporting Innovation</b> Supporting innovation and commercialisation and enhancing the linkages between the research community and business community</p> 	<p><b>Making it easier to do business</b> Ensuring regular dialogue between the private and public sector to ensure the regulatory environment and process is as easy as possible to engage with</p> 	<p><b>Investment Vehicles</b> Improving access to capital for local businesses</p> 
<p><b>Infrastructure</b> Ensuring infrastructure and land use decisions support economic growth</p> 	<p><b>Connections and Business Networks</b> Improving Christchurch's connectedness at a local, national and international level, enhancing the ability to do business and share ideas</p> 	<p><b>Sector Development</b> Developing growth sectors within the economy (Technology, Health, High Value-Added Manufacturing, International Education, Professional Services and AgriTech) and managing sector level market failures in the economy</p> 	<p><b>Business Development</b> Creation, growth, capability, retention and attraction of business to the region</p> 

## APPENDIX 2 – EXISTING PROJECTS / PROGRAMMES

### CEDS 2013 PROJECT LIST

The following table lists the projects that CDC is currently monitoring for the delivery of CEDS that impact on the city attractiveness.

Here is a link to a [progress review](#) which provides more detail on progress against CEDS 2013.

Project	Lead Agencies	Status
Create sector workforce plans that articulate the immediate, short and long term workforce needs of the sector and identify what is required to accelerate recovery of the sector and provide the foundation for long term economic growth	CERA/CDC	Completed
Establish an integrated information system including a quarterly snapshot of the labour market, an annual rolling labour report and quarterly sector workforce reports and statements	CDC	Completed
Establish an Employment and Skills Hub, a help service for employers to fill job vacancies that support the Canterbury rebuild	MBIE	Completed
Establish the Canterbury Skill Shortage List, a list which highlights occupations in shortage that are needed during the rebuild in Canterbury	DOL	Completed
Raise the profile of the Christchurch technology and manufacturing sectors and the employment opportunities within these sectors amongst the education community locally and the skilled worker community domestically and offshore.	CDC	Completed
Attend the Australian job fairs in March and April 2015 to promote Christchurch/Canterbury to potential migrants	CDC	Completed
Provide additional places for construction related trades training for the Canterbury rebuild, and trial new flexible study/work options	TEC	In progress
Develop a suite of initiatives that will increase the supply of skills and talent from secondary schools into training and employment that meets the employment demands of the manufacturing sector	CDC	In progress
Implement the Labour Market Earthquake Recovery Programme for greater Christchurch	CERA/MBIE	Removed, delayed or changed
Create an offshore recruitment toolbox to support any businesses needing to recruit from offshore; particularly focussed on supporting small business	CDC	Removed, delayed or changed

Enhance connections between schools, tertiary institutions and workplaces to develop industry-relevant skills within schools, and ensure graduates are earn or learn ready	To be determined	Removed, delayed or changed
Develop a sophisticated and targeted people and business attraction plan to attract highly skilled and productive people and value adding business	CDC	Removed, delayed or changed
Examine the economic opportunities and risks associated with Canterbury's ageing population	CDC	Removed, delayed or changed
Establish support schemes, local funding models and better connections between education and workplaces that better link students with business and more effectively encourage internships, apprenticeships, workplace training for youth or allow skill upgrades while working	CDC	Removed, delayed or changed

OTHER INITIATIVES	Lead Agencies	Status
CREDS Education and Skills work programme	Canterbury Mayoral Forum	In progress
SIGNAL – ICT Grad School	South Island Tertiary Alliance	In progress
CPIT Campus Plan	Ara (CPIT)	In progress
State school renewal programme	MoE	In progress
Open Visa	CDC	In progress