

Alberta

Alberta's construction industry is currently in an expansion phase, which began in 2012, and employment is rising toward the record levels achieved in 2007. Both residential and non-residential sectors have been growing and stakeholders report challenges with recruiting. Hiring difficulties continue in 2013.

Overall, the oil sands will lead resource development in the province, and between 2012 and 2021, production is projected to expand by 50 to 100 percent.¹ Construction activity in the oil sands has been gradually rising back toward the 2008 peak. As oil sands capacity grows there is a related need for investment in supporting infrastructure projects. A long list of these projects is currently underway and adding to the growth in labour requirements.

Declining housing activity and the winding down of some major infrastructure projects create a pause in employment growth from 2014 to 2016. The underlying momentum of resource development increases after 2016 when oil sands projects begin the next round of expansion that lasts until 2021. Housing and another round of infrastructure investment also revive at the end of the scenario period.

Stakeholders express concerns about global risks to growth and commodity prices, and about local risks related to housing. The 2013 *Construction Looking Forward* report for Alberta² presents moderate and balanced growth in total construction across the scenario from 2013 to 2021, but this conceals potential labour market pressures driven by the proposed rapid growth in oil sands investment and employment requirements between 2016 and 2018. This scenario balances many risks. Global economic growth may slow, thereby driving commodity prices down and prompting a pullback of investment. On the other hand, if the global economy gains some momentum, oil sands development may accelerate and fill any pause in growth in 2014 and 2015.

The expected limits to employment growth in 2014 and 2015 reflect the details of project timing. The overall momentum of natural resource development will continue and will require human resource planning for recruiting and attracting new construction workers from outside the industry.

The Construction Sector Council (CSC) uses a scenario-based forecasting system to assess future labour market conditions. It consults with industry, including owners, contractors and labour groups, to validate the scenario assumptions, and seeks input from government on related analysis and construction project lists. This approach provides current information and first-hand assessments of labour markets for individual construction trades and occupations.³

RESIDENTIAL LABOUR REQUIREMENTS

Gains in residential construction employment that occurred between 2010 and 2012 continue into 2013 as housing activity grows. A modest downturn in housing starts is expected later in 2013, but work that started in 2011 and 2012 will sustain employment growth until 2014. In 2015, employment turns down – just short of the high point achieved in 2006. Housing starts and overall employment then begin a mild cycle, compared to the volatility late in the last decade, that lasts to the end of the scenario period in 2021.

³ The CSC LMI system tracks labour market conditions for 33 trades and occupations. This group does not represent approximately 25 percent of the construction workforce that does not work on job sites (e.g., office support, engineers and office managers).



¹ As a guide for its oil sands investment and production assumptions, the 2013–2021 forecast scenario uses the Canadian Association of Petroleum Producer's June 2012 oil production scenario for the Alberta oil sands industry, which is based partly on a survey of industry members.

² The 2013 Construction Looking Forward release for Alberta reports new labour market assessments for the 2013–2021 period. The assessment includes 2012 as part of the analysis to track the impact of the global recession and recovery in local construction investment and labour markets.

Demographics are lifting housing activity from the recession levels in 2009 and 2010. From 2013 to 2021, the younger profile of the Alberta population sees births continuing to exceed deaths, and new arrivals keep population growth and new household formation⁴ above most other provinces.

There is a modest gain of 1,700 jobs across the 2013–2021 scenario, with growth exceeding 4,600 jobs in 2013 and 2014 and then losses of 4,000 jobs as the cycle declines in 2015 and 2016. The sustained high level of housing activity later in the scenario period adds more jobs.

NON-RESIDENTIAL CONSTRUCTION

Oil sands are the engine of growth for Alberta and the timing of construction and production of new projects sets the provincial pace. The current view, based on the Canadian Association of Petroleum Producer's 2012 forecast, speculates that production will grow steadily to higher levels and that the proposed oil sands expansion will unfold in two steps. The current plateau in construction will extend to 2015 and then a wave of new building surges ahead from 2016 to 2018. The second step carries construction well above the 2008 peak.

Oil sands development requires supporting infrastructure and the timing of these new projects is difficult to track. Current pipeline, electricity generation and transmission, transportation infrastructure and downstream oil and gas developments add more jobs. Many of the current projects end in 2014. This creates a dip in employment that coincides with slower growth in oil sands projects from 2014 to 2015.

As the 2016–2018 round of oil sands projects begins, the other non-residential work expands as well. Many trades and occupations common to all of these nonresidential requirements may move to the oil sands projects. The current situation and the 2016–2018 increase in oil sands projects create potential recruiting challenges for the following trades and occupations:

- · boilermakers
- · bricklayers
- · carpenters
- · contractors and supervisors
- · crane operators
- insulators

- · ironworkers
- sheet metal workers
- · steamfitters and pipefitters
- · welders

In some cases, these requirements are for specialized skills within a trade.

Labour mobility across sectors and projects may smooth out the cycles, and overall industry employment unfolds with moderate year-to-year changes that rarely exceed plus/minus 3 percent.

THE AVAILABLE WORKFORCE

The unemployed often represent the first source of supply as labour requirements grow, but low unemployment leaves a limited pool of workers. The industry's strong expansion left 2011 unemployment below historical levels, but above the record lows in 2006 and 2007. This is consistent with the views of stakeholders that although current conditions are tight, they are not as tight as those experienced in 2007 and 2008. This situation is largely sustained across the scenario period and unemployment is rarely an important supply source of skilled trades.

Long-term demographic trends drive another level of supply-side dynamics. The CSC labour market information system breaks down the annual change in the available workforce into retirements, new entrants and net in-mobility⁵. Retirements measure permanent losses to the workforce, and these are partially offset by new entrants aged 30 and younger entering the workforce for the first time.

The Alberta labour force will expand by 14,000 workers across the 2013–2021 scenario. Over the same period, replacement demand adds requirements estimated at just over 30,000 workers. With first-time new entrants estimated at 23,000, this leaves a gap of 21,000 workers that need to be found from outside the construction industry.

These long-term trends conceal important cycles – especially in non-residential construction. The biggest annual gains in the labour force occur in 2013 and these are associated with more than 6,500 new arrivals from outside the province. Most of the incremental workers are from outside the province.

There is an ebb and flow across the scenario with in-mobility rising to a peak again from 2016 to 2018 as the next round of oil sands work ramps up. The

⁵ In-mobility refers to the arrival of workers from outside the local construction industry.

⁴ Household formation refers to the change in the number of households (persons living under one roof or occupying a separate housing unit) from one year to the next. It is the means by which population growth is transformed into demand for new housing.

industry will be seeking almost 10,000 workers from outside the provincial workforce when the big nonresidential projects hire for 2016 to 2018 and beyond. While these gains will place strains on recruiting and human resource planning systems, they are not unprecedented in Alberta. Construction employers brought more than 23,000 workers into the industry in 2007 and 2008.

RANKINGS, RISKS AND OPPORTUNITIES

The rankings set out in the following table track periods of changing demands for individual trades and occupations. Each labour market is assigned an annual ranking from 1 (weak labour market conditions where job search is difficult) to 5 (where labour shortages will force recruiting from distant markets). Rankings are offered as a summary that combines the measures of employment growth, unemployment and net in-mobility set out previously.

Each trade and occupation has distinctive features that drive markets and are often not adequately described in statistics. Comments attached to the rankings add important dimensions and describe critical factors needed to understand special circumstances. Industry stakeholders have contributed their experience and expectations, and their ideas are reflected in both the rankings and the comments where the system might not fully capture market realities.

Where rankings differ across provinces and industries there is a potential for workforce mobility to balance labour markets. Much depends on the skills and experience of the workers and the requirements of the employers. Workforce mobility for key non-residential trades – many listed previously – have been encouraged by the expansion of the construction industry in Alberta. Additional analysis prepared by the CSC looks at oil sands construction and considers the distinct labour requirements there and the potential for mobility within the province across industries and sectors. This work is summarized in the companion report, *Construction Looking Forward, 2013–2021 Key Highlights, Alberta Oil Sands.* Mobility across these projects is crucial for balancing labour markets as work begins and ends on both oil sands and related infrastructure work.

Where rankings differ from equivalent measures in other provinces or industries, there is a potential for workforce mobility to balance labour markets. For example, other *Construction Looking Forward* reports show strong demand for resource projects in Saskatchewan and Newfoundland and Labrador in 2013 and 2014 and these demands will compete with needs in Alberta. If the Alberta project schedules remain as proposed for this forecast scenario, resource projects now scheduled in British Columbia from 2014 to 2016 would almost certainly recruit from the Alberta workforce that will be leaving projects ending at that time. There are many other examples that emerge from the *Construction Looking Forward* analysis for other provinces.

In general, global demands are drawing on Canada's natural resources and major projects are becoming a dominant feature for the construction workforce. Growing labour demands in "centres of resource construction," often in remote northern locations, are creating the need for a unique and mobile skilled workforce that includes many of the trades needed in Alberta. The local industry must face the challenge of managing a large, skilled, aging and dynamic group of workers who represent a major, but limited, national asset.

The *Construction Looking Forward* national report summarizes the provincial reports and considers the potential for balancing and managing this national labour force.

Market Rankings

- 1 Workers meeting employer qualifications are available in local markets to meet an increase in demand at the current offered rate of compensation and other current working conditions. Excess supply is apparent and there is a risk of losing workers to other markets.
- 2 Workers meeting employer qualifications are available in local or adjacent markets to meet an increase in demand at the current offered rate of compensation and other working conditions.
- 3 The availability of workers meeting employer qualifications in the local market may be limited by large projects, plant shutdowns or other short-term increases in demand. Similar or weaker conditions exist in adjacent markets so that mobility is an option. Employers may need to compete to attract needed workers. Established patterns of recruiting and mobility are sufficient to meet job requirements.
- 4 Workers meeting employer qualifications are generally not available in local and adjacent markets to meet any increase. Employers will need to compete to attract additional workers. Recruiting and mobility may extend beyond traditional sources and practices.
- 5 Needed workers meeting employer qualifications are not available in local or adjacent markets to meet current demand so that projects or production may be delayed or deferred. There is excess demand, competition is intense and recruiting reaches to remote markets.

MARKET RANKINGS FOR TRADES AND OCCUPATIONS IN ALBERTA

Trades and occupations	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Boilermakers	5	5	4	3	4	4	4	3	3	3
Employment is exclusively in non-residential work remain near current levels to 2015 befor market conditions. Growth slows across the r this trade is younger than average. New entr from outside the local market will be required	re demar emainde ants into	nd require r of the so the labou	ements g cenario p ur force a	row rapic eriod an ire estimation	lly betwee d markets ated to m	en 2016 s return te eet dema	and 2018 o balance and requi	, tighteni e. The ag	ng laboui ge profile	r for
Bricklayers	4	4	3	3	3	3	3	3	3	3
Employment is divided between residential a markets in 2013 and labour requirements re conditions are generally balanced. A limited to meet some market requirements. Stakeho this trade is older than average. New entran but workers from outside the local market m scenario period.	lated to i potential olders no ts into th	ndustrial for mobi te particu e labour	and non lity betwo ularly stro force are	-resident een the r ong requi	ial buildir esidentia irements ed to mee	ng rise st l and no for refrace et replace	eadily to n-resider ctory wor ement de	2021, bu itial secto k. The age mand re	ut labour ors may h ge profile quiremer	nelp for nts,
Carpenters	4	4	3	3	3	3	4	3	3	3
Employment is divided between residential ar and labour demands related to non-residentia are generally balanced. Some potential for m requirements, but mobility may be limited by t projects. Stakeholders note particularly strong age profile for this trade is younger than averar requirements, but workers from outside the lo and then again midway through the scenario	I building obility be he portat requiren age. New cal marke	construct etween the pility of sk nents in r entrants	ction cont e residen ills to me non-reside into the l	inue to ri tial and r et labour ential sca abour foi	se steadil non-reside demands affolding v rce are es	y to 202 [°] ential sec s for majo vork and timated f	1, but lab ctors may or industr in resider to meet re	our mark help to r ial and en ntial form eplaceme	et condit neet mark ngineering work. Th ent demar	ions ket g ie nd
Concrete finishers	4	3	3	3	3	3	3	3	3	3
Employment is concentrated in non-residentia then slow in 2014 and 2015 before rising to a balanced. The age profile for this trade is you replacement demand requirements, but work in 2013 and then again midway through the	new hig nger that ers from	h level of n average outside tl	employn e. New e he local r	nent by 2 ntrants ir narket m	2021, but ito the lab ay be rec	labour m	arket cor e are esti	ditions a mated to	re genera meet	ally
Construction estimators	4	4	3	3	3	3	4	3	3	4
Employment is divided between residential a 2013 and tighten labour markets, but then g the scenario period. A potential for mobility b requirements, but mobility may be limited by projects. The age profile for this occupation replacement demand requirements, but work demands midway through the scenario perior	rowth slo between f the port is older t kers from	ws. Indu the reside ability of han aver	strial and ential and skills to r age. Nev	l enginee d non-res meet labo v entrant	ering proj sidential s our dema s into the	ects con sectors n nds for r labour f	tinue to r nay help najor ind orce are	ise stead to meet i ustrial ar estimate	lily acros market nd engine d to mee	s ering t
Construction managers	4	4	3	2	3	3	3	3	3	3
Employment is divided between residential a 2013 and tighten labour markets, but then g the scenario period. A potential for mobility b requirements, but mobility may be limited by projects. The age profile for this occupation demands and to maintain balanced market of	rowth slo between to the port is older to	ws. Indu the reside ability of han aver	strial and ential and skills to r age. Red	l enginee d non-res meet labe ruiting e	ering proj sidential s our dema xperience	ects con sectors n nds for r	tinue to r nay help major ind	ise stead to meet i ustrial ar	lily acros market nd engine	s ering
Construction millwrights and industrial mechanics	5	4	2	2	3	4	3	3	3	3
Employment is concentrated in non-resident recede from current levels to 2015 before ris weaken in 2014 and 2015 as major projects period, but market conditions are generally be labour force are estimated to meet replacem required periodically during peak times to me	sing to ne wind dow balanced ient dem	ew peak I wn. Cons . The age and requ	evels in a struction a profile f irements	2018. La activity ir or this g , but wo	bour mar ncreases roup is at rkers fron	ket cond across tl oout ave	litions rer he remaii rage. Nev	nain tigh nder of th w entran	t in 2013 ne scenai ts into the	, but rio

Trades and occupations	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Contractors and supervisors	3	3	3	3	3	4	4	3	3	3

Employment is concentrated in non-residential construction. Demand requirements related to industrial and engineering projects rise steadily from current levels through 2021. Labour market conditions tighten in 2017 and 2018 as new oil sands projects start up. The age profile for this trade is older than average. Replacement demand requirements are not met by new entrants into the labour force. Recruiting experienced workers will be required to meet peak demands and to maintain balanced market conditions later in the scenario period.

Crane operators	4	3	3	3	4	4	3	3	3	3
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Employment is concentrated in non-residential construction. Employment requirements remain near current levels before increasing rapidly between 2016 and 2018 with the start of new oil sands projects. Labour markets tighten in 2016 and 2017 as activity peaks and then return to balanced conditions across the remainder of the scenario period. The age profile for this trade is about average. New entrants into the labour force are estimated to meet replacement demand requirements, but workers from outside the local market will be required to meet peak demands midway through the scenario period.

Drillers and blasters	3	3	3	2	3	3	3	3	3	3

Employment is concentrated in non-residential construction. Demand requirements related to engineering projects rise modestly from current levels through 2018. Labour market conditions are generally balanced over the scenario period, but loosen briefly in 2015. The age profile for this group is younger than average. New entrants into the labour force are estimated to meet replacement demand requirements, but workers from outside the local market may be required periodically across the scenario period to maintain balanced market conditions.

Electricians (including industrial and power system)	4	4	3	2	3	4	4	3	3	3
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Employment is concentrated in non-residential construction. Labour requirements rise in 2013, but then recede to 2015, before rising to a new high level of employment by 2021. Labour markets tighten in 2017 and 2018 as activity peaks and then return to balanced conditions across the remainder of the scenario period. Stakeholders note strong demands for workers specialized in power generation and transmission work. The age profile for this trade is younger than average. New entrants into the labour force are estimated to meet replacement demand requirements, but workers from outside the local market will be required to meet peak new demands in 2013 and again in 2017 and 2018.

Elevator constructors 3	4	3	3	3	3	3	3	3	3
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Employment is concentrated in non-residential construction. Demand requirements related to non-residential building construction and maintenance work rise steadily from current levels through 2021. Labour market conditions are generally balanced. The age profile for this group is older than average. Replacement demand requirements are not met by new entrants into the labour force. Workers from outside the local market may be required across the scenario period to meet requirements and maintain balanced markets.

Floor covering installers	3	4	3	3	3	3	3	3	3	3

Employment is divided between residential and non-residential construction. Demand requirements related to residential work tighten labour market conditions in 2013. Non-residential building construction rises steadily from current levels through 2021. Overall market conditions are generally balanced. There are limited opportunities for potential mobility between the residential and non-residential sectors. The age profile for this trade is about average. Replacement demand requirements are not met by new entrants into the labour force. Workers from outside the local market may be required across the scenario period to meet requirements and maintain balanced markets.

Gasfitters	4	4	3	3	3	3	3	3	3	3
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Employment is divided between residential and non-residential construction. Demand requirements rise steadily to 2021, but labour market conditions are generally balanced. There are limited opportunities for potential mobility between the residential and non-residential sectors. The age profile for this trade is about average. Replacement demand requirements are not met by new entrants into the labour force. Workers from outside the local market may be required to meet increasing demands across the scenario period.

Glaziers	3	3	3	3	3	3	3	3	3	3

Employment is concentrated in non-residential construction. Demand requirements related to non-residential building construction rise steadily from current levels through 2021, but labour market conditions are generally balanced across the scenario period. The age profile for this trade is younger than average. New entrants into the labour force are estimated to meet replacement demand requirements, but workers from outside the local market may be required to help balance market conditions across the scenario period.

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Trades and occupations	2012	2013	2014	2015	2016	2017	2018	2019	2020	202
Heavy equipment operators (except crane)	4	3	2	2	3	3	3	3	3	3
Employment is concentrated in non-resident n 2013 and continue to loosen in 2014 and a average. New entrants into the labour force the local market may be required to help ma	2015 as are estin	major pr nated to	ojects be meet rep	gin to wii lacemen	nd down. t demand	The age require	e profile fo ments, bu	or this tra ut worker	ade is ab	out
Heavy-duty equipment mechanics	3	3	2	3	3	3	3	3	3	3
Employment is concentrated in non-resident continue to build to peak levels in 2013. Stal for this trade is about average. New entrants but workers from outside the local market market	keholders into the	s report : labour f	strong de orce are	mand for estimated	r this trad d to meet	e for oils replace	s sands w ment der	/ork. The nand req	age pro	file
Industrial instrument technicians and mechanics	5	4	3	2	4	4	4	3	3	3
Employment is exclusively in non-residential recede from current high levels to 2015 befo tighten between 2016 and 2018 as new maj New entrants into the labour force are estim- market may be required to meet peak dema	ore rising or projec ated to m	to new p ts come neet repl	oeak leve on strear acement	ls later ir n. The ag demand	the scer ge profile requirem	nario per for this f	iod. Labo trade is y	our marke ounger t	et conditi han aver	ons age.
Insulators	3	3	3	3	4	4	4	3	3	4
			le for this	s trade is	vounder	than ave	erage. Ne	ew entrar	nts into th	ne
abour force are estimated to meet replacem midway through the scenario period to meet Ironworkers and structural	nent dem	and requ	uirements	, but wor	kers fron	than ave n outside 4	erage. Ne the loca	ew entrar I market 3	nts into th will be re	ne equire 3
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labour force are estimated to meet replacem midway through the scenario period to meet Ironworkers and structural metal fabricators and fitters Employment is concentrated in non-resident remain near current levels to 2015 before der start up and reach peak activity, tightening la and markets return to balance. The age profi estimated to meet replacement demand requidemands midway through the scenario perior Painters and decorators Employment is divided between residential a rise in 2013 to tighten labour markets and re but overall, labour market conditions are ger residential and non-residential sectors may of the portability of skills to meet labour demand in strong demand in the oil sands projects. T are estimated to meet replacement demand	4 increase i	4 ruction. I uuiremen rket condis group is s, but wo 3 residenti nts relate alanced a e to mair or industi profile for nents, bu	irements emand ro Demand ts grow ra titions. G s younge orkers fro al constru- ed to non across th ntaining b ial and e this grow ra this grow tworkers	s, but wor equireme 3 requireme apidly bet rowth slo r than av m outsid 3 uction. Du -resident e scenar alanced ngineerin up is abo	kers fron ints. 4 ents relai tween 20 ws across erage. N e the loca 3 emand re ial rise st io period. market c g projects ut average	4 ted to inc 16 and 2 s the rem ew entra al marke 3 equireme eadily fm A poten onditions s. Relate je. New	4 dustrial a 018 as no nainder of nts into t t may be 3 nts relate om curre tial for m s, but moi d skills in entrants	I market I mark	will be re 3 eering pr ands pro- nario peri- r force ar to meet 3 dential w through f tween th be limite al coating abour for	3 ojects jects od peak 3 vork 2021, , e d by gs are ce
2016 and 2018 as oils sands activity increas labour force are estimated to meet replacem midway through the scenario period to meet Ironworkers and structural metal fabricators and fitters Employment is concentrated in non-resident remain near current levels to 2015 before der start up and reach peak activity, tightening la and markets return to balance. The age profi estimated to meet replacement demand requidemands midway through the scenario period Painters and decorators Employment is divided between residential ar rise in 2013 to tighten labour markets and re but overall, labour market conditions are ger residential and non-residential sectors may of the portability of skills to meet labour demands in strong demand in the oil sands projects. T are estimated to meet replacement demand maintain balanced market conditions late in Plasterers, drywall installers and finishers, and lathers	4 increase i	4 ruction. I uuiremen rket condis group is s, but wo 3 residenti nts relate alanced a e to mair or industi profile for nents, bu	irements emand ro Demand ts grow ra titions. G s younge orkers fro al constru- ed to non across th ntaining b ial and e this grow ra this grow tworkers	s, but wor equireme 3 requireme apidly bet rowth slo r than av m outsid 3 uction. Du -resident e scenar alanced ngineerin up is abo	kers fron ints. 4 ents relai tween 20 ws across erage. N e the loca 3 emand re ial rise st io period. market c g projects ut average	4 ted to inc 16 and 2 s the rem ew entra al marke 3 equireme eadily fm A poten onditions s. Relate je. New	4 dustrial a 018 as no nainder of nts into t t may be 3 nts relate om curre tial for m s, but moi d skills in entrants	I market I mark	will be re 3 eering pr ands pro- nario peri- r force ar to meet 3 dential w through f tween th be limite al coating abour for	3 ojects jects od e peak 3 vork 2021, e d by gs are ce

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Trades and occupations	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Plumbers	5	4	3	2	3	3	3	3	3	3

Employment is concentrated in non-residential construction. Labour requirements related to non-residential building construction increase in 2013, but then recede to 2015 before rising again to new high levels of employment by 2021. Labour market conditions are generally balanced across most of the scenario period. The age profile for this trade is younger than average. New entrants into the labour force are estimated to meet replacement demand requirements, but workers from outside the local market may be required to meet increased demands early in the scenario period and again later to maintain balanced market conditions.

Refrigeration and air conditioning mechanics	4	4	3	3	3	3	3	3	3	3
an conditioning mechanics										

Employment is concentrated in non-residential construction. Demand requirements related to non-residential building construction and maintenance work continue to rise steadily through 2021. Labour market conditions are generally balanced. The age profile for this group is about average. New entrants into the labour force are estimated to meet replacement demand requirements, but workers from outside the local market may be required periodically to maintain balanced market conditions.

Residential and commercial	2	2	2	2	2	2	2	2	2	2
installers and servicers	3	3	3	3	3	3	3	3	3	3

Employment is divided between residential and non-residential construction. Demand requirements related to residential and commercial activity rise steadily from current levels through to 2021, but labour market conditions are generally balanced across the scenario period. A potential for mobility between the residential and non-residential sectors may contribute to maintaining balanced market conditions. The age profile for this group is about average. New entrants into the labour force are estimated to meet replacement demand requirements, but workers from outside the local market may be required periodically to maintain balanced market conditions.

Residential home builders	4	Λ	2	2	2	2	3	2	3	3
and renovators	-	-	3	3	2	5	3	5	3	J

Employment is exclusively in residential construction. Demand requirements related to this sector continue to rise and then decline between 2013 and 2015. Growth is more steady across the remainder of the scenario period, with labour market conditions generally balanced. The age profile for this group is older than average. Replacement demand requirements are not met by new entrants into the labour force. Demand requirements for this group may necessitate additional recruiting efforts to meet peak demands in 2013 and to maintain balanced market conditions later in the scenario period.

Roofers and shinglers	4	4	3	3	3	3	3	3	3	3
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Employment is divided between residential and non-residential construction. Demand requirements related to residential work rise in 2013 to tighten labour markets and requirements related to non-residential building construction rise steadily from current levels through 2021, but overall, labour market conditions are generally balanced across the scenario period. A potential for mobility between the residential and non-residential sectors may help to meet market requirements. The age profile for this trade is younger than average. New entrants into the labour force are estimated to meet replacement demand requirements, but workers from outside the local market may be required periodically to maintain balanced market conditions.

Sheet metal workers	4	3	3	3	4	4	4	3	3	3
Sheet metal workers	4	3	3	3	4	4	4	3	3	3

Employment is concentrated in non-residential construction, with specialized demands in cladding and decking. Demand requirements related to non-residential building construction and engineering projects continue to rise through to 2021. Labour market conditions tighten between 2016 and 2018 with the rise of oil sands and related work. The age profile for this trade is younger than average. New entrants into the labour force are estimated to meet replacement demand requirements, but workers from outside the local market will be required to meet peak demands midway through the scenario period.

Employment is concentrated in non-residential construction. Demand requirements related to industrial, engineering and maintenance work remain near current levels to 2015 before demand requirements grow rapidly between 2016 and 2018 as new oils sands projects start up and reach peak activity, tightening labour market conditions. Growth slows across the remainder of the scenario period and markets return to balance. The age profile for this group is younger than average. New entrants into the labour force are estimated to meet replacement demand requirements, but workers from outside the local market will be required to meet peak demands midway through the scenario period.

continued on next page

Trades and occupations	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Tilesetters	4	4	3	3	2	3	3	3	3	3

Employment is divided between residential and non-residential building construction. Demand requirements related to residential work rise in 2013 to tighten labour markets and requirements related to non-residential building construction rise steadily from current levels through 2021, but overall, labour market conditions are generally balanced across the scenario period. There are limited opportunities for potential mobility between the residential and non-residential sectors. The age profile for this trade is about average. New entrants into the labour force are estimated to meet replacement demand requirements, but workers from outside the local market may be required to maintain balanced market conditions across the scenario period.

Trades helpers and labourers	4	3	3	3	3	3	3	3	3	3
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Employment is divided between residential and non-residential construction. Labour requirements related to non-residential construction rise in 2013, but then decline briefly in 2014 and 2015 before rising steadily across the scenario period. Labour market conditions are generally balanced. A potential for mobility between the residential and non-residential sectors may help to meet market requirements. The age profile for this group is younger than average. New entrants into the labour force are estimated to meet replacement demand requirements, but workers from outside the local market may be required periodically to meet new demand requirements and maintain balanced market conditions.

Truck drivers	3	4	3	3	3	4	4	3	3	3
Employment is concentrated in non-resident	ial const	ruction. L	_abour re	quireme	nts relate	ed to eng	ineering	projects	continue	to
build to peak levels in 2013 and tighten labor	ur marke	t condition	ons. Mar	kets tight	en again	in 2017	and 2018	3 as majo	or oil sand	ds
projects start up. The age profile for this trad	e is aboi	it average	ne New	entrants i	nto the la	abour for	ce are es	stimated	to meet	

replacement demand requirements, but workers from outside the local market will be required at peak demand periods.Welders and related
machine operators4433444333

Employment requirements related to industrial and engineering projects remain near current levels to 2015 before demand requirements grow rapidly between 2016 and 2018 driven by new oil sands projects, tightening labour market conditions. Stakeholders report strong demand for pressure welders. Growth slows across the remainder of the scenario period and markets return to balance. The age profile for this trade is younger than average. New entrants into the labour force are estimated to meet replacement demand requirements, but workers from outside the local market will be required to meet increased demand requirements in 2013 and again midway through the scenario period.

Note: Replacement demand is the loss of workers due to retirement and mortality. Source: Construction Sector Council

Timely construction forecast data is available online at **www.constructionforecasts.ca**. Create customized reports on a broad range of selected categories within sector, trade or province covering up to 10 years.

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February 2012

Funded by the Government of Canada's Sector Council Program

