



THE IMPACT

of Fiscal Stimulus in Canada's Construction Industry

The Construction Sector Council (CSC) has prepared this brief preliminary analysis as a starting point for the 2009 *Construction Looking Forward* series of publications. High levels of uncertainty in the Canadian economy are raising questions about construction labour markets across Canada. This early analysis will help our stakeholders better understand how the CSC Labour Market Information (LMI) system will track the impacts of the federal government's stimulus package as announced in the federal Budget 2009. Our regional network of industry-led LMI committees is now reviewing the final economic projections and labour market assessments. Final CSC national and provincial LMI reports will be available in the spring.

Massive, global fiscal stimulus targeting economic recovery is focused on increased construction activity. The 2009 federal budget introduces significant fiscal stimulus, and coming provincial budgets will announce similar approaches. Much depends on the ability of the construction industry to adapt quickly and deliver billions of dollars in new activity. This document describes how this process will unfold across Canada, and reaches a preliminary conclusion that human and other resources can be mobilized to meet the challenge. Contractors and the workforce will face a challenge as plans for major industrial and engineering projects change and resources must adapt.

THE GENERAL STATE OF THE ECONOMY AND CONSTRUCTION

The emerging global crisis of confidence and ongoing collapse in all types of spending has prompted a coordinated shift in economic policy. The consensus view is that economic recovery will be driven by massive fiscal stimulus. Most countries are concentrating new spending on construction activities – usually infrastructure. Construction projects are the focus for spending because

- governments can access almost unlimited amounts of money,
- construction spending is controlled by government and can be accelerated, and
- new spending immediately increases the income and spending of unemployed construction workers and boosts purchases of local building materials.

This view of the economy was adopted by the federal government in the January 2009 budget and it is expected that subsequent provincial budgets will follow the same pattern. Half of the fiscal stimulus announced by the federal government is targeted at construction.¹

For this plan to work there must be ready capacity in the construction industry to meet this demand. Until recently, construction was among Canada's strongest industries, but construction activity in Canada is slowing down in early 2009 and as the year progresses, this weakness will increase, leading to the release of human and other resources.

¹ In Annex 1 of *The Budget Plan*, the government notes, "government can invest in infrastructure or purchase goods and services, which translates into an immediate, dollar-for-dollar increase in final domestic expenditure," and later notes, "the short-term multipliers for infrastructure spending, residential investment...are relatively high..." *The Budget Plan*, p. 239.

THE FEDERAL BUDGET

Including both the federal and provincial contributions to public infrastructure and housing construction, the 2009 federal budget would inject nearly \$30 billion over the next two fiscal years into construction investment. Budget estimates include about \$17 billion of construction projects in 2009 followed by another \$13 billion in 2010. This section reviews the details of the federal budget that impact construction.

RESIDENTIAL CONSTRUCTION

The federal government plans to provide up to \$7.8 billion in tax relief and funding to help stimulate the housing sector across Canada during fiscal year (FY) 2009-10 and FY 2010-11, and provincial-municipal participation is expected to raise the total to \$9.2 billion.

The following are the major components of the spending on the residential side:

- a Home Renovation Tax Credit (HRTC) that will apply only during 2009
- additional funding of \$300 million over two years for the existing ecoENERGY Retrofit program
- an increase from \$20,000 to \$25,000 on the first-time homebuyer limit on accessing RRSP savings
- increased funding for social housing, including \$1 billion for energy retrofits and renovations – cost shared 50/50 with the provinces
- \$400 million for the construction of social housing units for low-income seniors
- \$75 million for housing for persons with disabilities and \$200 million for northern housing
- \$400 million over two years for new projects and the remediation of existing social housing stocks on reserves for First Nations
- up to \$1 billion in new payments over two years under the Provincial-Territorial Base Funding Initiative to expedite “ready-to-go” infrastructure projects
- \$2 billion available over two years for low-cost loans to municipalities to finance improvements to housing-related infrastructure, such as sewers and water lines

PUBLIC INFRASTRUCTURE

The federal government will boost infrastructure spending by close to \$12 billion over the next two years. More specifically, the budget shows new spending of \$6.2 billion in FY 2009-10 and \$5.6 billion in 2010-11. Adding in expected new provincial and municipal government funding of nearly \$9 billion, the construction industry could benefit from a \$21 billion boost in infrastructure projects over the next two years.

New budget initiatives related to infrastructure investments include the following:

- a \$4 billion Infrastructure Stimulus Fund over two years to renew public infrastructure
- \$500 million for projects in small communities and \$500 million for recreational facilities
- \$400 million set aside for the Green Infrastructure Fund
- \$2 billion for improving infrastructure at universities and colleges
- \$515 million over two years for “ready-to-go” First Nations infrastructure projects
- \$700 million in federal infrastructure aimed at improving rail services, bridges and highways, refurbishing harbours and improving border crossings

This increase in infrastructure spending is expected to be matched by \$8.9 billion in provincial contributions, bringing the total stimulus from new infrastructure spending to \$20.7 billion over the next two fiscal years.

The budget initiatives listed above total \$30 billion in new construction spending for 2009 and 2010. This is well over half of the total \$52 billion package announced in the budget. The announced spending is intended to be immediate and temporary with programs tilted to 2009 and most activity scheduled to end after March 2011. Expectations are high that this boost will kick-start the economy. Equivalent expectations are riding on similar efforts around the world.

IMPACTS OF THE FEDERAL BUDGET

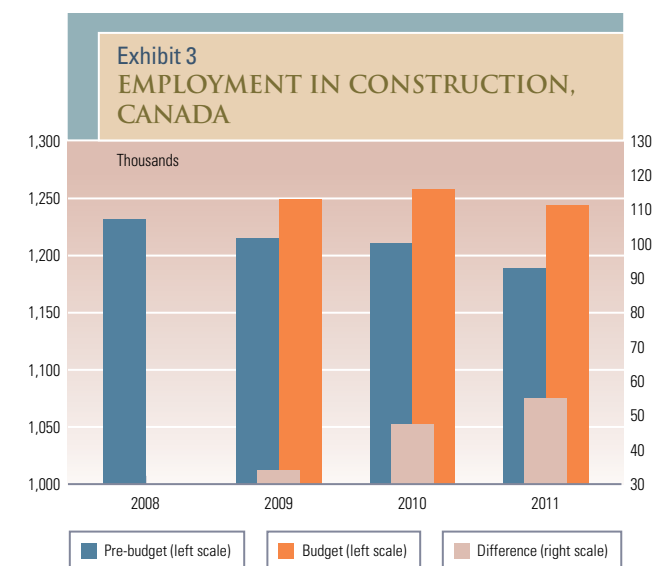
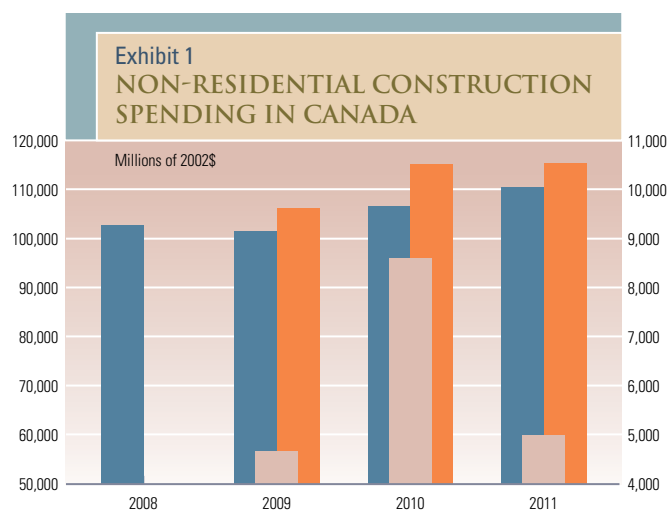
The fiscal stimulus included in the federal budget and anticipated in coming provincial initiatives will boost construction spending and employment over the next three years. The major boost to activity is concentrated in 2010, but the final boost in the first quarter and indirect effects continue to raise activity in 2011.

Using the economic and labour market models in the CSC LMI system, exhibits 1 through 3 document the impacts in construction. Each graph measures the level of activity from 2008 to 2011, including the pre-budget case, where all the elements of the federal budget have been removed. The budget case includes the stimulus from the construction projects noted above as well as the other features of the budget. The difference between the budget and pre-budget cases is measured on the left scale. Note that these graphs are reporting spending in constant 2002\$, correcting for the impact of price changes. Budget measures reported above are in current dollars and will show higher values.

Exhibit 1 reports impacts for non-residential spending. In the pre-budget case, construction in this sector was expected to decline in 2009 and then rise moderately in 2010 and 2011. Much of the remaining strength in the pre-budget case is related to specific construction projects identified in the lists compiled by the provincial LMI committees. At the peak in 2010, the stimulus included in the budget adds to this activity with just under \$8 billion to non-residential activity, mostly in engineering projects. The boost to non-residential construction carries on in 2011 as government spending will continue early in the year and there are lagged multiplier effects as projects continue later in the period.

Exhibit 2 tracks the impacts in residential construction. Note that residential spending in the pre-budget case was expected to decline in each year. The direct impacts are concentrated in 2009 and are focused mainly on renovation activity. Impacts in 2010 reflect a combination of delayed additions to renovation (as the last part of the federal spending will fall in the first quarter of 2010) and some indirect and multiplier effects in the housing market. These latter effects carry on into 2011. Overall, the residential impacts are smaller than the non-residential impacts. Even with the fiscal stimulus, the total value of residential spending in the budget case will decline in each year from 2008 to 2011.

These impacts on construction spending combine to drive impacts on total employment shown in Exhibit 3. Note that employment was expected to decline by between 10,000 and 20,000 jobs in each of 2009, 2010 and 2011 in the absence of the budget. Stimulus impacts are significant, but delayed in 2009 and jump higher in 2010. The last three months of government spending in the first quarter of 2011 combines with the indirect and multiplier



effects to sustain the employment gains in 2011. The impact analysis suggests that fiscal policy will be enough to just offset expected declines in construction employment in the pre-budget case. With the budget stimulus, overall employment will show very small gains from 2009 to 2010 and remain unchanged in 2011.

INDUSTRY DYNAMICS AND RESPONSE

How will the construction industry adapt to this shock?

The proposed federal spending and related provincial-municipal participation will prompt purchases of a wide range of goods and services, including the following:

- traditional building materials (concrete, wood, steel, plastics, roofing, floor covering, asphalt, etc.)
- design, engineering and architecture services
- construction management (estimation, HR management, training, project management)
- labour (skilled trades, construction occupations, supervisors, etc.)
- information and communication technology (labour and equipment)
- fixtures, furniture and appliances
- energy-efficient and environmentally friendly products
- government regulatory, administrative and support services

Of these requirements, the largest component will likely be construction labour, and this is the focus of the CSC LMI system. But the other required goods and services must also be available from suppliers.

Activity will not be evenly distributed across traditional construction sectors. Spending is concentrated on residential renovation and on roads, bridges, ports, rail, government buildings and related infrastructure. The design of the stimulus is intended to be distributed across all provinces and territories by population, although this depends on the decisions by each province and municipality to participate in the offered shared-cost arrangements. These decisions may also expand the scope of new construction to other forms of infrastructure, including utilities, schools and hospitals.

There is a concern that the infrastructure spending may be delayed during planning, regulatory review and contracting. The regional LMI committees, who oversee

the CSC LMI system, have considered these barriers and suggest that some portion of the public infrastructure investment suggested in the budget for 2009 may be delayed until 2010. Residential measures will likely reach the level suggested by the budget in each year. Beyond these timing issues, the CSC analysis assumes that all the planned budget spending reaches construction sites by the end of FY 2010-11.

The industry's capacity to accommodate the stimulus depends on many factors, including corporate capital, financing, project and financial risk, depth of senior management, design, estimation and project management, partnering and skilled labour. This capacity varies across construction firms from very small renovation businesses to mid-size road builders and huge integrated general contractors. Similarly, owners will have different requirements as they contract for work. Homeowners are already calling their local renovation firms to take advantage of the Home Renovation Tax Credit. At the other extreme, governments will be requesting complex proposals for public-private partnerships that involve finance, design, building and operating new infrastructure. The skilled labour component is tracked in the CSC LMI system.

The state of the other construction sectors is important in the adjustment process. In the very recent past there were labour shortages and other bottlenecks in construction in some provinces/regions. But rising unemployment has hit construction late in 2008 and early this year – later than other sectors. Once started, the progression of construction job losses accelerates quickly. Supporting evidence mounts with housing starts and building permits falling rapidly. In less than six months conditions have totally changed. Indeed, many industry leaders have indicated that project shutdowns and layoffs will increase across 2009. At the same time, material costs have declined, inventories have increased and manufacturing shipments have dropped since last summer. These conditions force some industrial builders to either cancel or delay projects now, but raise the possibility that project economics will soon improve. Much depends on resource prices and the capacity of owners to provide financing.

In our early assessment, the CSC is seeing a positive impact from the stimulus package. At this point in time, the CSC forecast will be based on the assumption that one third of the public infrastructure investment suggested in the budget would be undertaken in 2009, while residential measures could be undertaken as suggested by the budget.

Investments in infrastructure have significant effects on jobs, particularly in the construction industry, which is beneficial in the context of the current recession. Many material costs have also declined substantially since last summer and the labour market is softening, freeing up resources to tackle new infrastructure projects at reasonable cost. In the longer term, when the economy is operating at full capacity, the net effects of such investments are likely to have lower benefits because of rising costs.

The turn of events has been the most severe in Alberta as several large oil companies have announced the delay or cancellation of upgrader and other megaprojects, lowering proposed investment in Alberta by \$45 billion. Highlights reported in the media in the last three months include the following:

- Suncor will delay completion of its \$20.6 billion expansion of its Voyageur oil sands operation and halved its 2009 capital spending budget to \$3 billion.
- Enbridge shelved its \$346 million Trailbreaker pipeline expansion that would have shipped western crude through central Canada to the United States.
- Royal Dutch Shell withdrew its application to build its Carmon Creek oil sands project and postponed its Athabasca oil sands expansion.
- Nexen and OPTI Canada delayed a decision to expand their Long Lake project.
- Total SA pushed back the on-stream date of its Joslyn mine to 2014 from 2013.
- EnCana and Petro-Canada cut 2009 capital spending plans by more than \$3 billion.
- Norwegian StatoilHydro ASA cancelled its \$4 billion Kai Kos Dehesh upgrader.
- Petro-Canada put off until next year a decision on the mining portion of its \$21 billion Fort Hills oil sands project.

The rest of the country was not immune from the cuts either. Recent announcements include the following:

- Chevron Canada postponed drilling a second well in the Orphan Basin off Newfoundland.
- Irving Oil extended construction of its \$8 billion Eider Rock oil refinery in Saint John, New Brunswick, from four to eight years.

- Rio Tinto suspended an \$800 million expansion of its iron ore operations in Labrador and \$6 billion from spending on aluminum smelter projects in Quebec and British Columbia.
- In British Columbia, the Port of Prince Rupert will delay the \$650 million expansion of its container terminal by at least 18 months.
- Canadian Royalties suspended its \$520 million Nunavik Nickel Project in northern Quebec.
- Western Canadian Coal will stop work at its Willow Creek metallurgical coal mine in northwestern BC and is putting capital spending on hold.

These recent announcements suggest that in general, construction resources will be available on the needed scale as the fiscal stimulus unfolds. Much depends on mobility and the ability to adapt.

A more precise accounting for the availability of needed trades and other occupations will be reported in the *Construction Looking Forward* reports for 2009. The CSC LMI system tracks the declining demand for new housing and industrial building. These shifts create potential mobility across sectors, industries and regions, and the system measures the available workforce in the critical trades. For example, early analysis reveals that the following trades and occupations will find significant opportunities in the infrastructure projects:

- construction managers, estimators, contractors and supervisors
- crane operators
- heavy equipment operators and mechanics
- ironworkers
- labourers and helpers
- truck drivers
- welders

The biggest positive impacts will be concentrated among this group with crane and heavy equipment operators, ironworkers and truck drivers getting a large share of the jobs.

For other trades concentrated in residential activity, the renovation stimulus will help to offset job losses on new housing. These trades include the following:

- electricians
- floor covering installers

- painters and decorators
- plasterers and drywall installers
- plumbers
- refrigeration and air conditioning mechanics
- roofers
- tilers

Virtually the entire construction labour force will be involved in a rapid transition across jobs and sectors. There are limits to potential mobility due to required skills, transition costs and information about work opportunities. Mobility from new residential building to renovation is relatively easy and opportunities will be specific to each region so that distances will pose a limited barrier. The transition from new residential to infrastructure is more challenging in the major trades such as carpenters, electricians and plumbers, and job losses in residential may not match gains in the infrastructure projects.

Another important relocation will move skilled trades into the infrastructure work from the big resource and industrial projects being cancelled and delayed. This movement would include managers, estimators, contractors and supervisors, crane operators, heavy equipment operators and mechanics, truck drivers and helpers and labourers.

Key trades and occupations are losing jobs outside construction and moving to work in the infrastructure sector. Here again, skills gaps and work experience will present barriers, but large numbers of equipment operators, mechanics and truck drivers may move in response to the fiscal stimulus.

The final dimension will be moving across regions. This shift will be more limited in the residential sector, at least in 2009, as gains in renovation activity will act to partially offset the loss of jobs in new housing equally across regions. As the stimulus to renovation lapses in 2010, conditions in the residential sector will deteriorate.

In non-residential construction, the reverse movement of workers from the West back East is reported to have already begun. Layoffs from the resource projects are expected to gain momentum in the middle of 2009. As the media reports summarized above suggest, it is not clear whether delayed projects will resume after 2011 and help to avoid a pending surge in further job losses as the infrastructure stimulus ends in 2011.

This preliminary accounting of labour market adjustments will be refined and validated in the market rankings and upcoming meetings with the provincial LMI committees that form the core of the CSC LMI system. The *Construction Looking Forward 2009* reports will provide more details.

CONCLUSIONS

This preliminary review of the budget stimulus suggests that human and other construction resources will be available to meet the plans in the federal and provincial budgets. But contractors and the workforce will face a challenge as plans for major industrial and engineering projects change and resources must adapt. The degree of availability will vary by region and reflect the relative impacts of the final surge in construction at the cycle peak in 2008. Over the medium term, the age profiles of trades/occupations will increase retirements.

Under the emerging circumstances described here, construction may enjoy a “soft landing” while other industries face much more serious damage.

These general and preliminary conclusions conceal important differences across sectors in construction. There are major uncertainties that include the potential for mobility and the extent of the emerging recession.

It is certain, however, that the adaptive capacity of the industry will be strained by the anticipated pace of change. It will be particularly important for governments and the industry to expand traditional industry support systems that act to buffer shocks and manage the costs of change. More resources for employment insurance, apprenticeship and other training and safety programs and improved labour market information are all essential.

The Construction Sector Council remains committed to supporting the industry’s workforce during the adjustment period.

This budget analysis is one of several reports the Construction Sector Council will be releasing over the next few months.

The full provincial Construction Looking Forward, 2009–2017 reports will be released later in the spring and will be available on the CSC website, www.csc-ca.org, and the CSC Construction Forecasts website, www.constructionforecasts.ca.

The Construction Sector Council will review the impact of infrastructure investment again in the summer of 2009.