

Alberta Heavy Industrial Construction Workforce Projections

Heavy industrial construction projects in Alberta have been challenged with “tight” availability of skilled trades for most of the past two decades. Forecasts of workforce demand have been important information for companies which want to understand the risks of “tight” labour and the potential impact on planned project execution.

COAA has been issuing heavy industrial workforce forecasts since 1996. Since the mid-2000’s, these forecasts have been done in partnership with BuildForce Canada (formerly known as the Construction Sector Council). This is a “top-down” macro-economic forecast, driven by expected levels of capital investment and reviewed for reasonableness by COAA’s Workforce Forecast Committee.

In 2011, COAA partnered with the Government of Alberta (GoA), Oil Sands Labour Force Group, to develop a “bottom-up” demand projection driven by current and announced major capital projects. A network of contacts in owner companies has been assembled to gather up-to-date project information, and a numerical model has been developed to translate the planned scope of each project to the numbers of trades required.

The COAA/GoA team will co-operate and co-ordinate with other groups (e.g. the ROSE Committee for shutdowns and ENFORM for petroleum operations and maintenance). To understand supply/demand for skilled trades in our own heavy industrial construction sector, we must understand supply/demand in each of the major industry sectors that employ the same trades.

BuildForce Canada Forecast – Construction Looking Forward

This macro-economic demand and supply forecast scenario is driven by expected levels of capital investment, which is translated via numerical model into expected construction activity and expected labour demand for each province. Within Alberta, because of the sustained high level of activity, oil sands construction is broken out. In addition to overall construction activity, forecasts of availability for 34 construction trades and occupations are presented. Advisory committees in each province, including COAA’s Workforce Forecast Committee, review for reasonableness the input assumptions and the output forecasts.

The BuildForce Canada forecast is issued once per year, in January.

The summary forecast, linked below, is provided by BuildForce Canada as part of the longstanding partnership with COAA. Additional summary information is available on their website and detailed forecasts are available at www.constructionforecasts.ca.

COAA/GoA Projection

This projection is based on the scope and timing of Alberta projects which are known, i.e. in the planning or construction stages. The scope is translated via numerical model into expected labour demand for Alberta, for 18 construction trades. The COAA Workforce Forecast Committee reviews for reasonableness the numerical model calibration factors and the output projections.

This projection originally focused on oil sands (and was known as OILMAP, Oilsands Information Labour Market Analysis Projection). It has now expanded to include all type of heavy industrial construction: petrochemicals, natural gas, power transmission, upgraders, pipelines and modular construction. Work is beginning on a supply model for the 18 construction trades; in due course supply/demand comparisons will provide insight into potential workforce gaps.

The COAA/GoA Projection is issued twice per year, in the spring (at the Best Practices Conference) and in the fall.