

# MARKET INTELLIGENCE

Q4 2006 Newsletter

BTY's market intelligence newsletters analyze industry trends to provide our clients with insights about the current and future BC building market. We offer this market intelligence as part of our mission to provide knowledge to build with.

## 4TH QUARTER HIGHLIGHTS

- Construction cost escalation eases to 5% to 7%
- Lower material costs for some materials; especially lumber
- Residential construction to dip slightly in 2007

## Stability Returning to Marketplace

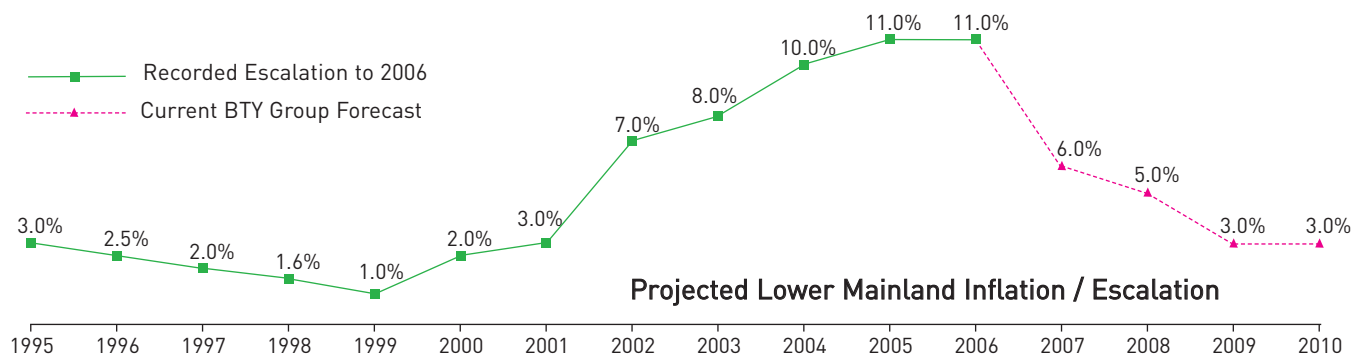
Rate of escalation to slow to between 5% and 7%; costs will continue to rise

In the Q4 2005 newsletter, BTY Group forecast an 11% cost escalation for 2006 in BC's construction industry. We forecast this high rate of escalation due to increased construction volumes, a limited labour and contractor pool and rising materials cost. The actual commencement of many projects, including 10 Olympic facilities, expansion at YVR, the Convention Centre expansion, the Canada Line transit project, and record residential starts, all combined to sustain the 11% increase, as recorded by Statistics Canada. We further anticipated that this high rate of escalation would decline only slightly to 10% in 2007 and 9% in 2008.

A number of factors now lead BTY Group to believe that the rate of cost escalation will decrease more rapidly than originally anticipated so that BC will likely experience a 5% to 7% increase in cost escalation in 2007. The first and perhaps most influential factor is traditional market adjustment. Faced with significant cost escalation, companies and government downsize projects to stay within budget or reconsider and defer projects. Other factors contributing to easing the cost escalation rate include:

- Gradual housing market adjustment in 2007 with slight dip in residential starts
- Current stabilization in the price of oil. As of Q4 2006, it is at its lowest level in 15 months
- Downturn in the housing market in the US contributes to lower costs for some materials; especially lumber
- Stronger Canadian dollar, leading to lower costs for imported construction materials
- Absence of cost drivers such as the unexpected 2005 oil price spike due to lost production following hurricanes Katrina and Rita, and the truckers' strike following the sudden rise in gas prices.

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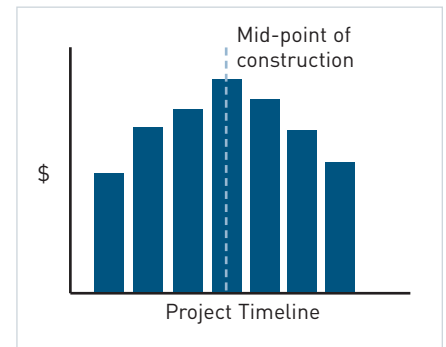
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While the rate of escalation is projected to ease, construction costs will remain high as BC is expected to remain in a robust growth phase at least until 2010. Real gross domestic product has been forecasted to grow at 4% a year from 2006 to 2010, compared to below 3% in the previous five years. Business investment and high in-migration that will sustain new residential construction are two of the main drivers. Labour costs are expected to remain high due to full employment with infrastructure projects in BC commencing and the oil sands expansion continuing in Alberta.

## HOW TO BUDGET FOR ESCALATION

When preparing a project budget, or a budget update, it is prudent to include an allowance for cost escalation. Since budgets and estimates are usually prepared in "current" dollars, it is wise to consider that costs will increase prior to project completion.

The most effective way to allow for cost escalation is to prepare a cash flow forecast, using the budget or estimate in current dollars together with the project schedule. Using a spreadsheet, distribute dollar amounts month-by-month over the duration of each of the main budget items, such as design fees, municipal charges and construction. Add up the total costs for each month and apply the escalation rate to the monthly cash flow total to derive the escalated dollars for that month. The difference between the sum of the monthly escalated amounts and the budget in current dollars gives the escalation allowance, or the escalation contingency.



In the absence of sufficient information to prepare a cash flow forecast, the "Mid-point" method can be used. Take, for example, an apartment building project with an anticipated construction duration of 12 months. Using the cash-flow method, divide the total construction budget by 12 and plug that amount into each month. Then apply a separate, monthly index to each month. Alternatively, apply the escalation rate to the mid-point of construction (month 6) to the total budget to derive the escalation allowance. That is because the mid-point is the average of the indices for the 12 months.



So why use the mid-point of construction and not the date of tender when selecting an escalation rate? After all, contractors usually provide a fixed-price amount at the time of tendering, not somewhere in the middle of the project. Those contractors (and trade contractors), however, will be performing their work at different stages over the construction duration and will anticipate what their costs will be at the time that their portion of the work is under construction. In other words, the trades will include in their bids an allowance for escalation.

While space does not allow the inclusion of other cash flow issues and/or variants, this brief guide does provide a sound, basic approach to budgeting for escalation.



Housing starts projected to decline in 2007 and 2008

## RESIDENTIAL REAPPRAISAL

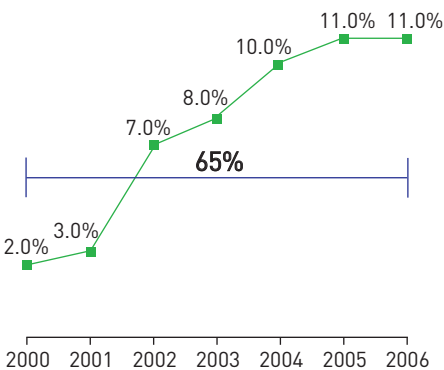
Following a projected peak of 37,000 units in 2006, residential construction in BC is forecast to slip slightly to 36,600 in 2007 and to 34,900 in 2008 (CMHC).

In Greater Vancouver, the most costly market, the total number of housing starts year to date in 2006 was virtually unchanged from the same period last year. Single-detached housing starts increased 20% to 4,983 units, while multi-unit starts dipped 7% to 11,010 units compared to the first ten months of 2005. Total housing starts in less costly areas saw rapid rises year over year. Victoria saw a 36% increase in total starts, with a 71% increase in multi-unit starts. Abbotsford's total starts grew by 33%, with multi-units starts posting a 61% increase.

The expected adjustment in high-cost markets will be relatively moderate and longer than usual, since it is being driven by worsening affordability for low-equity buyers and not by deteriorating economic fundamentals (according to Credit Union Central of British Columbia). At the same time, significant income growth and in-migration are expected to provide substantial underpinning to residential demand.

## HIGH CONSTRUCTION COST HAS BECOME THE NORM

Following relative stability in the 1990s, construction costs in the Lower Mainland since 2000 have experienced a cumulative compounded increase of 65% across all projects. This broad escalation continues to force contractors, clients and consultants to adjust expectations and budgets. The table to the right shows changes in construction cost ranges for some major building types between 2005 and 2006.



## UNIT RATES

Project Type	2005	2006
Residential Care Facilities	\$2300 - 2600/m <sup>2</sup>	\$2500 - 2900/m <sup>2</sup>
Hospitals	\$2900 - 4200/m <sup>2</sup>	\$3200 - 4700/m <sup>2</sup>
Research Laboratories	\$4200 - 4400/m <sup>2</sup>	\$4600 - 4800/m <sup>2</sup>
Teaching Laboratories	\$3400 - 3800/m <sup>2</sup>	\$3800 - 4200/m <sup>2</sup>
High-rise Residential	\$2300 - 2500/m <sup>2</sup>	\$2300 - 2700/m <sup>2</sup>
Low-rise Condos	\$1100 - 1400/m <sup>2</sup>	\$1200 - 1500/m <sup>2</sup>
Townhouses (Wood Frame)	\$1200 - 1500/m <sup>2</sup>	\$1300 - 1700/m <sup>2</sup>
Shopping Centres	\$1300 - 1800/m <sup>2</sup>	\$1400 - 2000/m <sup>2</sup>
Offices	\$1800 - 2300/m <sup>2</sup>	\$1900 - 2400/m <sup>2</sup>

The ranges of costs shown are for the Vancouver Area and omit the extremes at each end of the scale for each building type. The opinion of a Professional Quantity Surveyor should be sought when preparing a budget for a specific building.

# LOOKING AHEAD



## THE ESCALATION FORECAST

### *Robust growth in store for the BC economy*

The BC economy's robust growth is expected to continue with a projected 4% increase in GDP through 2010. Business investment and spending is forecast to grow by more than 6% per annum between 2006 and 2010. These increases, combined with residential construction to meet continued population growth and continued spending on infrastructure projects, will help support provincial construction GDP. However, recent corrections to labour rates and materials costs, stable oil prices, interest rates and the downturn in the US housing market are expected to ease cost escalation pressures and reduce the rate of increase to between 5% and 7% for 2007.

Costs will continue to rise, albeit at a slower rate. According to the BC Government Major Projects Inventory, 783 projects valued at \$110 billion were planned or underway at mid-2006. As a result, there will be continued strong demand for labour and materials placing upward pressure on costs. Sequencing of major infrastructure projects will help reduce the sustained pressure on labour and materials as these projects work their way through the system.

## MAJOR INDICATORS

BTY develops its escalation forecast for the next year and beyond based on a number of indicators and the inter-relationships among them:

- Percentage increase in GDP: The major banks are forecasting GDP growth ranging between 3.5% and 4.8% through 2008.
- Net in-migration and employment: The strong BC economy supports an expected increase in net in-migration to 66,000 in 2007. Unemployment rate expected to fall to 4.4 per cent in 2007, and to just above 3% in 2008-2010.
- Interest rate: The prime lending rate to range from 4.25% to 5.5 % for 2007.
- Value of the Canadian dollar: The continuing strong dollar reduces the cost of imported materials.
- Residential and non-residential construction volumes: A record 783 major capital projects, worth an estimated \$110 billion, were planned or underway across BC in mid-2006, according to the Major Projects Inventory. Non-residential projected to rise by 13% from 2005 to 2007, compared to 5% from 2002 to 2004.
- Year over year housing starts: To decline slightly from a projected 36,900 units in 2006 to a projected 35,300 in 2007, but demand to remain strong.
- Labour rates and material prices: Labour rates have now corrected after long stagnation; continued high demand for labour will keep rates high. The fall off in the US housing market has contributed to a moderation in some materials costs.

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BTY Group is one of Canada's most successful and experienced Cost Management and Project Management consultancies providing services through our offices in Vancouver, Toronto, Edmonton and Calgary.

*The opinions expressed in this newsletter are those of BTY Group and are provided as information only. Readers are cautioned on the use of the data provided. BTY strongly recommends that readers retain the services of a Professional Quantity Surveyor prior to establishing budgets for their projects.*