

# SCHOOL CONSTRUCTION

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## Schools losing out as construction costs soar

• *Cost of a new elementary school has risen 68% since 2001*

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### Cost of new elementary schools in Western Washington

Year	2001	2003	2004	2005	2006
Average cost per square foot	\$150.56	\$155.08	\$185.46	\$193.54	\$252.83
Change from 2001	0.00%	3.00%	23.18%	28.55%	67.93%
Year-over-year change	0.00%	3.00%	19.59%	4.36%	30.63%

Source: State Office of the Superintendent of Public Instruction



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Much has been made recently of the cost of construction, and school construction is no exception.

In fact, school construction has been feeling the sting of rising costs faster than the general construction industry. Recent bid results for elementary schools in Western Washington from the state Office of the Superintendent of Public Instruction and other estimating sources show that school construction costs have skyrocketed in the last few years.

Bids for middle schools, junior highs and high schools also increased at similar rates, but there is more data at the elementary school level. Indices that show construction costs increasing at 8 percent or even 10 percent per year over the last three years for the general building construction industry do not accurately reflect what school districts are experiencing.

There is not a single reason for this disparity and rate of increase. Instead, there are a number of factors that are contributing to this trend. Some of these apply to construction generally while others are more specific to school construction.

Starting in early 2004 owners began to see bids come in beyond estimates and budgets. The natural reaction was to suspect that the designs were too extravagant, or that the estimates had not been carefully prepared. What quickly became apparent was that this was occurring across the board regardless of the makeup of the design and estimating team. This was the start of a trend of escalation that continues to this day.

### Pent-up demand

The general causes for escalation include increased world demand for construction materials, especially from China. When China joined the World Trade Organization, the already robust Chinese economy became supercharged and the demand for construction soared.

At the same time, oil prices began their increase and the costs of petroleum-based construction materials and the transportation of all materials began to spiral upwards.

Initially escalation was seen in the price of steel, but ultimately other commodities such as cement, gypsum board, and more recently copper and asphalt, have escalated rapidly. Contractors are not able to predict this escalation and so must cover the risk they are taking through higher bids.

In Western Washington a pent-up demand for construction was also being realized after a number of slow growth years at the end of the 1990s through 2001.

This demand included private-sector work as favorable interest rates made speculative development more attractive, and private owners went forward with long-planned projects.

In the public sector a variety of organizations began extensive building programs. Universities, community colleges, Sound Transit, and the Port of Seattle all had numerous projects they offered to the construction marketplace.

Add to this the nearly \$2 billion in K-12 school bonds that were passed in this period, and the demand for construction quickly surpassed anything that had come before.

Then, in 2005, hurricanes Katrina and Rita hit, doing tremendous damage to the South, putting further pressure on construction commodities.

More subtly, reconstruction has put increasing pressure on the labor supply. The construction labor force, which has traditionally been able to “follow the work,” has no longer needed to move since there is ample work everywhere. This has led to labor shortages in our local market and has served to drive up costs.

### **Schools projects risky**

All of these factors have come together to form a market with high demand for construction services coupled with a shortage of materials, unpredictable and rapidly escalating prices, and labor shortages. There is simply so much work to choose from that contractors and subcontractors can choose the projects that are most attractive to them and avoid projects with higher risks or lower rewards.

This last point directly affects the school construction market.

School construction is a risky business for contractors. It is by law (GC/CM aside) a low-bid competitive situation. From a contractor’s viewpoint this forces down profit margins. They are forced to work with the lowest-bid subcontractors — subs they may never have worked with before.

They must comply with many public procurement laws. They are subject to onerous contract conditions that shift much of the risk to contractors. They must operate on tight schedules. They must go through multiple layers of school district bureaucracy to get construction changes approved. They are strictly limited on the markups they can charge for changes — and the list goes on.

All of these factors make school construction less attractive to contractors and subs. If private work or negotiated work with higher profit margins and less risk is available they will choose it every time. In the current overheated market where work is abundant, contractors are able to choose not to bid schools.

Those that do remain in the market find they have less competition and can therefore protect themselves by offering conservative (higher) bids. Many recent projects have had only one or two bidders, with some subcontracting categories

receiving no bids at all. When this happens there is no way to control costs, and we see a spike in bids beyond the underlying escalation.

What will happen in the future? Eventually market forces will cause some sort of stability. As interest rates go up many speculative projects will no longer make economic sense.

Owners will eventually delay projects due to lack of funds and the demand for construction will decrease. Competition will increase and bids will again be more competitive. Market forces will also lower the underlying commodity escalation we see. The key question is when these market forces will have an effect.

In the meantime owners and designers need to budget projects to recognize the uncertainty in the market. They must find ways to make school projects more attractive to contractors by lowering contractor risk.

Some projects are now trying incentives to attract bidders but the jury is still out on the effectiveness of this strategy. Regardless of other approaches, thorough documents, fair contract conditions and a reputation for fair treatment of the contracting community is a must to make your projects attractive to bidders in a competitive market.

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