



*“Recent Construction
Prices and Fire/
Rescue Stations”*



Stewart · Cooper · Newell
Architects

“Recent Construction Prices and Fire/Rescue Stations”

Written by: **Ken Newell**, AIA, LEED AP BD+C

Stewart-Cooper-Newell Architects

I realize that I’m getting old, but I’m reminded just how old I’m getting when I look back at the construction cost of the fire stations we designed in the 1980s. At that time you could build a quality station...we’re not talking pole barn...for \$80+ per square foot. I’d love to reminisce and trace the three-decade history of how those costs have changed over time, but it is suffice to say quality stations cost a little more than that today!

In the good ole’ days you could count on consistent construction cost inflation of 3-5% per year? If you were developing a Capital Improvement Plan for a new station three years from now you could just take today’s construction costs, increase it by 3-5% per year for three years, and know that what you had budgeted would likely be fine. Not anymore!

We all understand that the construction industry has always experienced price spikes (and rarely decreases) mostly due to some sort of material or labor force issue. Many departments, who last year budgeted more than enough funds to build this year, are now forced to scale back their plans. Many departments believe that we are still in a depressed economy, and that they will benefit from significantly lower construction costs.

Our design firm typically receives construction bids on multiple projects each month, most of which are fire or other public safety facilities. The construction cost tracking provided herein is based solely on pricing received on Fire/Rescue stations that we have been associated with over four decades. If you have intentions to build or renovate in the near future, please take a moment to consider what is happening in the construction world and what you can do about it to protect the viability of your upcoming project.

Recent History

From 2000 until 2006 the construction industry was booming. That was great for those in the industry, but not so great for those wanting to build. Along with a very busy construction market, there were events that caused incredible construction cost increases during that period. The wars following the 911 attacks, the tremendous growth of the Chinese economy, hurricane Katrina, these were just some of the events that commonly yielded 15-30% increases *per year* construction inflation rates.

So when the 2006 to 2007 construction inflation numbers were reported at a mere 5%, everyone gave a sigh of relief. Little did we know that it was a foreshadowing of the Great Recession knocking on our door.

From 2007 to 2008, construction prices decreased approximately 12%. Then from 2008 to 2009, they dropped another 16%. It was a great time to build a new station **IF** you had the capital in hand, and that was a big **IF** considering that the recession had greatly diminished public revenues. The projects that were “shovel-ready” and funded during this time became the beneficiaries of the lowest construction bids in years. This period was the beginning of a bad time to be in the construction industry. The lower bid costs were deceptive because they were not based on the contractor’s reduced material or labor cost. To the contrary, material costs continued to inflate. The lower bid costs were based on starving contractors giving away all hopes of profit in a too-often futile attempt at staying in business. Roughly one-third of all building contractors, subcontractors, and material suppliers went out of business.

By the time that the 2009 to 2010 construction inflation numbers came in, it was apparent that the building contractors who still existed had reached their bottom threshold of lowering prices to stay in business. Reducing labor costs could no longer counteract increasing material costs. That year saw a 9% increase in bid results. The upward trend continued from 2010 to 2011 at an even greater 12% inflation rate. 2011 to 2012 showed an 8%± construction cost increase, which returned us to the construction cost level prior to the recession. 2013 finished with a 9% increase from 2012.

So that brings us to 2014. You may want to sit down for this. 2014 ends with a fire/rescue station construction inflation increase of between 20-23% over 2013. What is causing such large increases? There are many factors, but the most significant reason appears to be “supply & demand.” Owners delayed their building projects for as long as they could. Many decided this year to move forward with their overdue projects. Remember how we mentioned all the building contractors, subcontractors, and material suppliers went out of business during the Great Recession? Those that survived have been extremely cautious in “staffing-up.” Who can blame them? The demand for materials and labor has far exceeded the supply. The number of bidders showing up for public construction bids has reached the lowest levels in years because everyone is so busy.

The builders’ good fortune is very unfortunate for those wanting to build. Many cities or departments have received higher than budgeted construction bids this year, only to rebid the projects with reduced scopes, or “value engineer” the project with the apparent low bidder. Some owners have simply had to shelve their projects until a later time.

Conclusion

What can you do to avoid the greatest adverse impact to a construction project during these volatile times? Here are a few ideas that may help:

1. Consider a scope change in what you need to build now. If portions of your facility are to accommodate future growth, design the building so that those portions can be easily-built additions in the future. Maybe you can “shell-in” portions of the building and “upfit” them at a later date.

2. Investigate whether a construction type change can fit your needs and program. Steel, masonry, wood, pre-cast concrete, pre-engineered metal, etc. all have their advantages and limitations. Knowing which of these construction types will fit your program needs and budget is critical.
3. Set realistic construction budgets. Projecting construction costs several months early has never been more difficult than today. Protect yourself by using high cost estimates. Very few people will be upset with you when the project comes in *under* budget. If your department is like most others, it won't be difficult to find something productive to do with left-over funding.
4. Continually educate those that will provide your building funds. Whether it is a City Council, Town or County Manager, Department Board, etc., you should regularly update them on the current bidding climate. Each time your designer provides an updated estimate make sure to pass the information along. Give them reference articles that describe the issue. Don't let the decision makers get to Bid Day without knowing what to expect.
5. Make wise, informed decisions, but move quickly. Construction inflation rates can eat away at your project scope in a very short period of time. For example, assume you have just the capital today for the project you need, but you are not ready to receive construction bids for twelve more months. If there is ten percent construction inflation by bid opening, you will either have to get your hands on ten percent more money, or reduce the building size/scope by ten percent.
6. Finally, design wisely. Make sure you and the rest of your design team know how to maximize your program needs in the minimum space. Every wasted square foot will cost you more money today than it did last month. It is more important than ever to select designers who know the ins-and-outs of your building type.

Don't let the ups and downs of the construction climate stifle your plans. Just plan wisely, do your homework and stay informed!