Building Schools in a Tight Economy? Do Your Homework



By Chris Watts

ith unemployment rising and the public more concerned about the economy than at any other time in recent memory, the idea of a municipality deciding to spend millions of dollars to build or refurbish a school seems an uphill challenge to say the least.

In the best of times, voter approval for school construction projects is difficult to get; during a recession, that difficult task seems all but impossible. But when a community's schools are too small for the population or their roofs are leaking and causing mold problems, a construction project cannot wait out the economy.

As any teacher will tell you, the secret to success is proper planning and homework so you have the right information when it's time to take your test. The same holds true for a municipality that is looking to build a new school or to undertake a significant renovation in this troubled economy. The task isn't impossible; it just requires the building committee to do a little extra work to ensure that the project is correctly specified and budgeted.

When the economy is down, the price of building actually goes down.

"There's no question that this is one of the most difficult environments we've experienced in some time for municipal building projects," says Charles W. Boos, CEO of Kaestle Boos Associates, an architectural firm that specializes in municipal construction projects throughout New England. "With taxpayers concerned about paying for heat this winter, asking them to agree to spending tens of millions of dollars on a new school or a significant renovation project seems foolhardy at first glance. But when a town really needs a new building—whether due to a significant increase in student population or damaged or outdated facilities—the case needs to be made to the taxpayers as to why the school is necessary. If the facts are presented in an honest way and voters see that the project is really needed—and that there are financial benefits from undertaking a project in a down economy—then that project has a very good chance of being approved."

But often, municipalities do not do their homework on projects. One only needs to read the newspaper to see stories of towns encountering problems with their current building projects: towns with school construction projects running significantly over budget, "value engineering" to reduce costs on current projects, and postponing building, causing students to learn in crowded or damaged classrooms. Boos offers these tips to avoid such problems when looking to build or renovate a school:

Do You Really Need It?

"Ask yourself if this project is really needed. Can it be delayed? Chances are the project is really needed if it's gotten to the point of having a study committee or a building commission. But you need to really think about it and see if this is truly your best option," Boos recommends.

"Have you done the studies to determine if building new is really the best option for state reimbursement or is a renovation-as-new a better choice? Does your study show that you're suffering from long-term population growth or is this just a temporary spike in enrollment? Taxpayers won't support a project that is seen as a luxury or something that could be delayed. But if the project is really the best option for the town, you need to have the facts in place to prove to the taxpayers it is."

Do the Groundwork

"Every state has its own requirement as to how detailed and involved an advance study needs to be in order for the project to qualify for state funding. The advice I would give is the more you do up front, the less chance you'll have a surprise at the end. That is why doing the bare minimum probably isn't the smartest way to go," says Boos.

"Whenever I see a school system that has to send a project back out to referendum due to cost overruns or has to 'value engineer' a project to reduce costs as the school is being built, that just tells me that corners were cut in the study stage. You'll hear excuses like 'No one can predict the commodity market' or 'Inflation is just out of control,' but they are just excuses. Most of the time, it's just a case of the people behind the project not being honest with themselves about the scope of the project or the costs of materials."

Do your research and be honest with yourself and the taxpavers.

States treat the studies differently. In Connecticut, for example, the law requires a school system to complete a basic study of needs and specs of the new school. But in Massachusetts, the law requires a town's study to carry through to building schematics before sending the plan to referendum. The cost difference can be more than \$400,000, but Boos says a town will have a better grasp of the real costs of the project with the complete study.

Towns in Connecticut will eventually compile all the same data that a town in Massachusetts would, but towns in Massachusetts are in a much better position to understand all the costs associated with a project.

According to Boos: "One area where a study is vital is projecting the real costs of the building materials. In the past few years, we had a huge increase in the costs of materials like copper pipe and electrical wire due to the surge in copper prices. And even gypsum board went way up after Katrina hit the United States. I've seen some towns struggling with those factors, but I know that a few of those towns chose to ignore the signs and didn't properly budget their project with the right contingencies for the rise in prices. They hedged their bets that the price of the materials would go down and they didn't."

Be Honest, Expect Opposition

"Municipal projects always face the scrutiny of the public, and every town has its own taxpayers association that always sides with the 'don't raise our taxes' vote," says Boos. "So don't expect your project to be loved by everyone in the town."

"You need to focus on educating those parts of the electorate who are willing to learn about the project and see why it is truly needed. Show that you have accounted for cost and have an answer for why each part of the project is important. If your plan calls for a gymnasium, you need to know why it is needed. If your project leaves out some features, explain why they were omitted. Most people will be receptive to learning the reasoning behind the project. And if you're honest about the project,



you'll be able to show the voters that your project was thoroughly vetted and is fiscally responsible."

An example of this is a school construction project that Kaestle Boos Associates is involved with in Griswold, Connecticut. The town's population has recently grown significantly and has stressed the town's existing school facilities.

Franklin Everett, chairman of the Griswold Connecticut School Building Committee, recalls: "I went into this project not believing that we needed the extra space. But once we did the space needs study, we found out that our town's housing growth was phenomenal and we decided to review the options. After some research and studies, it was determined that it made the most sense to build an addition onto the middle school and renovate-as-new our elementary school. We made an honest effort to educate our voters during the referendum campaign and because of that it passed on its first vote."

Think of Everything

The better you lay out exactly what you need at the beginning, the better control you will have on the real costs of the project. For example, if your town wants to build a school using green technologies, such as solar-powered electricity or geothermal heating and cooling, it's better to know at the start rather than to have to delay the project later when the engineering must change.

"When we started our project, the idea of incorporating green technologies was appealing, but it was hard to justify the higher up-front costs because the payoff period was so long. But with the recent spike in oil costs that type of thinking has changed," says Everett.

"Now the payoff for green technology is significantly shorter, and taxpayers are more open to paying a higher up-front cost, knowing that they will save money down the road. However, because we didn't anticipate the high cost of oil, it forced us to go back and reevaluate our plans, and we decided we had to explore the costs of adding geothermal instead of a traditional HVAC [heating,

ventilating, and air-conditioning] system. I would suggest that any school system looking to build now thoroughly investigate green options as the market has really changed, making them a more viable choice."

Buy Low, Sell High

Some of the most successful businesspeople have become successful because they acted contrary to the market. They bought stocks when no one else wanted to buy. The same can hold true for your school system. When the economy is down, the price of building actually goes down.

"Since early 2008, the cost of raw materials has declined significantly and the cost of fuel has also recently come down. All this means a municipality can now build or renovate a school for less money than it would have cost last year," says Boos. "So my advice is that towns that are willing to stomach the challenge of getting a project approved will get a better deal for their taxpayers. While it's easier for taxpayers to approve a project when the economy is soaring, it's a better deal for them overall when the market is down like now. It's a real catch-22. Most towns will be afraid to commit to doing project in a down economy, but they'll never get better prices than now."

One example of a "benefit" from the hard economic times can be seen in the Griswold project. The school system recently received news from its construction company that the total cost of its project will be reduced by some \$1.8 million—more than a 6% savings—because of raw material cost declines and the simple fact that contractors are willing to cut their profit margins to get business.

When you look at Boos's advice, you can sum it all up by saying: do your research and be honest with yourself and the taxpayers.

"When you set the project budget, make sure you have appropriate design and construction contingencies and that your building committee puts in the time to ensure that all the details of the project are examined," he advises.

"This isn't to say that you still won't have some degree of scope creep; every project suffers from that. But if you're honest with yourself and are open to hearing honest advice from your architect and builder, you'll have a better grip on the project and know if it will be able to stand on its own. Because if it gets to the point where you're dealing with a school construction project with a flawed preconceived budget, the truth is it's often better to walk away and start again than to subject yourself to the pain of constantly fixing a critically flawed project."

Chris Watts is a freelance writer in Windsor, Connecticut, and is the former bureau chief for Metro Networks in Hartford and editor for the Associated Press in Washington, D.C. Email: chris@pmarketingllc.com