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Estimates Unveiled

Using General Cost Models for Identifying and Understanding Areas of Difference Between Estimates

Forward by John A. Postava, President, Simsol Software, Inc.

I first met Brad at PLRB conference too many years ago to mention. Most recently we ran into each other at the PLRB's Large Loss Conference held in Tampa, Florida earlier this month. Brad is National Property Supervisor for GuideOne® Insurance and not only handles large losses but also supervises other adjusters in the handling of large, complicated losses.

In my opinion, a large loss is quite like a small loss – only the numbers are bigger and there are usually more interested parties involved in the adjustment of the loss.

Brad is one heck of a writer and the following article is one of the best, most succinct articles on the realities of estimating I have ever come across (I wish I and written it!).

To read more of Brad's articles and other claims-related information, please follow the link below and, if you are truly a claims professional, enjoy the reads.

John Postava
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http://www.claimsadvisor.com/Articles/?i=68

By Brad Sharp, AIC
GuideOne® Insurance

Identifying areas of difference among estimates is a crucial step in determining if similar and proper methods have been used. In order to evaluate the areas of difference, an organized method of analysis is necessary to establish a reasonable range of costs for the repair.

Begin with Authority and Knowledge

Proper repair cost analysis begins with careful inventory and scope of building damage. The process involves determining the percentages of the total square footage that require

exterior shell repair, replacement of interior finishes, replacement or repair of MEP (mechanical, electrical, and plumbing), and mitigation or demolition. This can be performed before a line item scope and estimate of repairs is complete and can provide a guideline around which an organized scope and division of work is built. An alternative approach is to evaluate the line item scope inventoried from the building to derive the preliminary general repair costs. This information assists in evaluating the line item repair estimate for accuracy or omissions.

Each step of preparing an estimate is dependent upon using proper observations, evaluations and assumptions. Determining the right repair quantity and cost for building damage is crucial in evaluating both the estimate you have prepared as well as the estimate you are presented. We all have been presented an estimate that is significantly different than our evaluation of the damages. Our credibility and negotiation strength depends on a thorough evaluation of an appropriate cost of repairs. It is also important to focus on determining a proper range of costs. Identical work can have differing price tags for such reasons as the economy, approach, labor and profit necessities. It can be counterproductive for either party to take the position that their exact dollar figure is the right one. If there is a large variance percentage, it is appropriate to ask questions and evaluate the difference

This discussion is not about computer estimating platforms that generate a cost for each process in the estimate. Rather, it is a view of the process of developing a construction budget with which to compare other estimates. Assumptions are necessary with this process and must be carefully based on experience and analysis. This process will provide three levels of evaluation. There are no considerations in these examples for location factor modifications of the cost. The intent is to show the method so the logic can be applied.

Understanding the Process – General Evaluation

The first look at a loss can be overwhelming. Whether a house fire or a large commercial building, it is helpful to look at a large loss as simply a series of smaller, related losses. The difference between a residential and commercial loss is the materials and methods used in the construction of the building. The similarity is a methodical approach in identifying the items requiring repair in each room and the building shell.

The first step is to see the forest first, then the trees. Develop a footprint of the building with dimensions. Determining the total square footage will provide a framework for delineating those areas that require differing degrees of repair. There are four general degrees of repair, and often a specific area of the building may require all four. These general degrees of repair are:

1. Mitigation or demolition
2. Replacement of interior finishes
3. Replacement or repair of MEP
4. Structural or building shell repairs.

Using the square footage of the building and the degree of repair allows determining the percent of the whole that each of these areas requires. This particular process will account for costs of mitigation that are encountered in a water or fire loss. General assumptions are used, and a wide range of circumstances must be considered in accounting for this portion of the loss. (See Table 1)

The first step in the evaluation of the loss involves mitigation. For this illustration we have assumed mitigation and demolition of 40% for the replacement of interior finishes, including some walls, doors and final finishes. We have assumed that 50% of the building will require light mitigation to prepare the structure for the final repairs. The replacement of interiors is broken into two areas: One, 40% is where there has been demolition of all finishes; and the other, 50% requiring painting, ceilings and carpet. The exterior shell also requires repair that constitutes 10% of the floor area. This estimate takes into account both the total square footage of the building and the percent of damage to determine how many square feet require each repair process. Each processes is then assigned an assumed repair cost.

This is a general budgeting process similar to one conducted in pre-construction planning and budgeting. These assumptions are to be evaluated with the other methods of budget costing and the final line item estimate. This process will give a reasonable range for subcontract bids. The process is completed by using general conditions/overhead and profit guidelines and architectural fees.

Understanding the Process – Percentage Evaluation

This procedure uses a typical square-foot cost guide such as R. S. Means or National Construction Estimator. In addition to providing per-square-foot construction costs, these guides outline what percentage of the total construction cost is attributable to particular functions such as framing, electrical, and HVAC. These guides provide specific details for each type of building to be constructed.

This method uses the same assumptions and methods used in the previous example but assigns the percentages to particular general trade details. These major divisions of the trade details are: substructure, shell, interiors, and MEP. (See Table 2 online)

These categories are subtotaled, and costs of running the job are accounted for in general requirements, overhead, profit of the general contractor and architectural fees. In this percentage evaluation estimating process, the particular trade functions are shown under the major divisions. The next column would carry the general cost per square foot followed by the percentage that each of the categories account for in the total construction trade cost. Using these categories, a percentage of damage of the total square feet is assigned for each of these categories. The estimator then calculates the dollars each of these repair assumptions would cost per trade category.

The far right column would be titled "Damage $ Total" and allows comparison to the trade breakdown of a computer-generated estimate on platforms such as Marshall Swift Boeck, Xactimate, Simsol and others. This method of budgeting provides a means of comparison to a lone item estimate. If there is a significant difference, look at the details in the line item estimate for quantities, material price or other variables particular to the line estimate. Items that require modification in the computer estimating platform for difficulty or material quality cost adjustments may cause variation in the trade cost and, therefore, in the final job cost estimate.

Understanding the Process – Item-Specific Evaluation

This method provides more detail while still using quick and general calculations. (See Table 3 online) Like the previous method of using percentages of the construction divisions, this method provides for more subcontract-specific costs, so both trade breakdowns and subcontract bids can be evaluated. The difference is the ability to place a specific percentage on particular items, such as interior doors, ceiling finish, painting, roofing and the like.

More exact trade analysis is provided for purposes of comparison with computer-generated line item estimate. This method may be helpful in more difficult areas of estimating, such as electrical, plumbing and HVAC. While it does not replace a detailed estimate prepared with knowledge of the materials and various subcomponents required, it does provide a more detailed basis of analysis than a straight cost per square foot that is available from some computer estimating platforms.

The "Item-Specific Evaluation" process uses the same format as that of the "Percentage Evaluation" process. The difference is assigning a percent of damage rather than assigning a damage percentage to the general trade category. This table calculates the building's square footage involved in each repair that is multiplied by the specific cost per floor square foot. The right column will provide budget figures to evaluate the trade breakdown of a computer-generated estimate as well as bids received for the actual construction. If it is determined these preliminary budget estimates are similar to the detailed line item estimate, they can be a valuable tool in evaluation of the claim through the entire construction process.

The purpose of these tools is to provide cost ranges based on the assumptions and inputs used to prepare the estimate. They are not intended to replace accurate and detailed line item estimates, but to be used as a guide to evaluate the total and individual trade estimate categories.

Contractor Fees and General Requirements

All three examples use assumptions for contractor fees. The section outlining contractor fees is a general guideline which encompasses job supervision, job site requirements, insurance, permits and all other fixed and variable overhead costs. There is a provision

for the general contractor profit that is generally 10%. These items will vary by job, and economics of scale must be considered on large projects.

The topic of general requirements, overhead and profit is easily treated in detail as its own topic. Architectural fees generally fall into approximately a 7% category but are not always appropriate or necessary. The permit requirements of local building officials will establish the level of detail and drawings necessary. Not every project will require a complete set of drawings that the 7% figure represents. A significantly lower figure may be appropriate; if there are considerable engineering requirements, other adjustments may be required in this category.

Maintain Authority and Position

It is important to note that these particular costs reflect construction to current building codes. It is improper to assign additional costs to these particular items. If there are items in addition to the scope required by building codes, only those items should be given consideration for additional cost.

Having a guideline to evaluate and reconcile differences between estimates is critical to negotiating differences of opinion. While there is no replacement for being adequately educated to write authoritative estimates, these methods will provide a range of costs that can be expected in any accurate estimate. As changes in the scope develop, parallel adaptations will be required in your cost models to maintain accurate cost budgets. If you are presented with an estimate that is significantly higher or lower than what you have estimated, these methods provide a means to identify and qualify a difference so you can negotiate the proper settlement.