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# ASPE

#### AMERICAN SOCIETY OF PROFESSIONAL ESTIMATORS

# Estimating

in DH

SERVING CONSTRUCTION ESTIMATORS BY PROVIDING EDUCATION, FELLOWSHIP, AND OPPORTUNITY FOR PROFESSIONAL DEVELOPMENT. EDUCATION, ETHICS, STANDARDS, CERTIFICATION, FELLOWSHIP... THESE LEAD TO THE ULTIMATE GOAL, <u>PROFESSIONALISM.</u>

# Why Do I Need to Know How

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# to Schedule?

How many estimators do you know that think that scheduling is for project managers and not estimators? I know a bunch that leave that up to the project manager to figure out. Estimators estimate costs. Let the PM nail down the schedule. Right?

**WRONG!** If the estimator doesn't have at least a "30,000 Foot View" of the project schedule, how will they know what possible cost impacts exist in the project estimate and how much has been allocated for each one?

The project estimator is just what the name states. He or she is the PROJECT ESTIMATOR and that means that they are responsible for estimating all of the costs for the project. Once you have been awarded the project and additional schedule costs are found, it's too late. Those additional costs come out of the profit of the job.

So, if you don't have a comprehensive scheduling program to schedule with then use and Excel spreadsheet to line out the schedule and determine an estimated project duration.

You need to know how you would build the project if you were the superintendent on the job site. You have to put yourself in the shoes of the builder and show the future PM and superintendent how you saw the project. How you saw the possible cost impacted activities and what you did to circumvent those project risks?

You need to have that schedule completed before you finish your estimate. With that schedule you help determine discipline scopes, possible added costs, who has what covered and when is it covered, is there any possibility of project delays or gains and other estimate related items that help insure a complete and comprehensive estimate on bid day.

You don't have to know everything about scheduling. You just have to imagine the building of the project in the order it will go up in your head. Write down the activities the same way you build the estimate.

EXAMPLE:	<u>Start</u>	End
Sitework: Activity Start:	1/15/21	
Strip/Grub: 3 Days -	1/15/21	1/19/21
Site Cut/Hauloff: 4 Days -	1/20/21	1/26/21
Bdg Pad: 5 Days -	1/27/21	2/2/21
Paving Lime Stabilization: 3 Days 2/1/21		2/3/21
Sitework Completion:		2/4/21

If you do this for each activity for the project and use these dates in your spreadsheet, you will have a good idea of activity items, order of magnitude and a good overall idea how the project goes together. This insures a more complete estimate and gives the PM a great starting point in which to plan the project at handoff.



Serving Construction

The American Society of Professional Estimators serves construction estimators, by providing education, fellowship and opportunity of professional development





## 8 Common Construction Estimating Mistakes

#### By: Kendall Jones on May 17th, 2019 - Construct Connect

Estimating is one of the most difficult jobs in construction. It is also one of the most important. Profits are typically won or lost based on how accurate your estimates are and how closely they match up to your final project costs.

One or two mistakes could throw your estimates completely off and will result in a bad bid, one that you will either lose because it's too high or win because it's so low that you won't make a profit. Here's a look at some the most common construction estimating mistakes and how to prevent them.

#### Not Conducting a Site Visit

No two jobsites are identical and unknown site conditions can cause unexpected, and costly, issues when construction gets underway.

#### **Inaccurate Takeoffs**

Accurate takeoffs help you determine the exact quantities needed for all your materials and supplies.

#### Labor Costs

Construction business owners say "labor costs are the hardest to estimate and are ranked as the most expensive project cost."

#### Materials & Supplies Costs

Locking in prices for your materials is crucial but don't forget to make sure that you provide quantities to your suppliers.

#### Failing to Assess Risks & Creating

Risk assessment helps in your bid/no bid decision making. A good estimator can identify a project that is too risky and pass on submitting a bid. It also helps to determine how much to estimate in for contingencies

Making Uneducated Guesses Don't gamble on your bids by making uninformed or uneducated guesses in your estimating.

Not Reviewing Your Work Double check your measurements are accurate, and your math is correct for all your costs. Give yourself adequate time to put your

#### estimates and bid together.

Not Reviewing Subcontractor Estimates Be sure to review their bid estimates and proposals thoroughly. Make sure they understand exactly what aspects of the projects you are wanting them to bid and complete.

Accurate estimates start with accurate takeoffs. Make sure you get the basics right and the rest will fall into place

## Productivity Variables in Construction Costs

Estimating construction costs moves from science to an art when you begin to address the variables that can affect them.

One the most elusive variables in estimating construction costs is productivity. If your company is self-performing in various trades and have kept time records of previous tasks completed then you have productivity data that you can use when assigning productivity factors to future work done by the same crews.

However, many companies do not self perform trade functions and therefore must rely on RS Means data, past estimates and/ or project data to extract various production factoring data.

The effects of weather can have a major impact on productivity, and it's not uncommon for most other conditions that affect labor productivity to vary job to job, as well as over the course of each job.

The estimator's use and implementation of trade productivity can also mean the difference of a competitive bid result or the opposite result. Because of this variable productivity in the corresponding trades must be reviewed and identified in the estimating process and not after you have the job.

To reduce productivity lost to travel time you have to add the necessary tasks and costs that will provide clear and direct access for crews, materials and equipment. From a personnel perspective, you also have to factor in all the things needed for human comfort such as toilet facilities and heat to avoid the negative effects of discomfort. Just addressing the top three productivity wasters could increase project productivity immensely.

In his book, "Choosing Project Success," J.F. McCarthy writes that construction trades are only productive about 30% of the time. The rest of their productivity is taken up with waiting (29%), traveling (13%), receiving instructions (8%), moving tools and materials (7%), starting late and quitting early (6%) and breaks (5%). Interestingly, McCarthy also points out that it isn't uncommon for management to be unproductive 90% of the time due to inefficient methods used for document management and communication.

The estimator's overall view of the project requirements is essential to identifying and assigning necessary costs to appropriate cost items based on production variables. Forty foot high ceilings, building a four story building next to a busy city street or protecting a polished concrete floor area are just some of the variables that can have drastic production affects on multiple trades and overall completion time. Estimating isn't just counting "sticks and bricks" any more.

## SMARTER ESTIMATING: Avoiding Onscreen Takeoff Mistakes.



Using an digitaltakeoff software program such as Onscreen Takeoff, Planswift, VU360 or other packages is a time saving and accurate way to perform quantity takeoffs.

However, just because the plan shows it's 1/4"=1'0" scale doesn't mean that it is. This could make a drastic difference in your overall quantity results. <u>How do we fix</u> <u>this problem?</u>

First, set the automatic scale and check a horizontal dimension on the plan. Does it match? If it doesn't then use the calculate scale method to tell the software what the distance of a particular that horizontal dimension should be. This will force the scale to be correct with the verified horizontal dimensions.

Secondly, once the calculated scale option has been done verify a vertical dimension. Many times if the PDF drawing has been skewed in the copying process and the vertical scale may not match the horizontal scale. Therefore you will need to calculate the scale on the vertical dimension as well.

## **ADVERTISING**

### We Need YOU!



#### Newsletter Advertising Prices

Four (4) quarterly newsletters will be published and issued to the Chapter membership and associated industry firms in the Dallas/Fort Worth.

We need you to make this newsletter better. If interested in advertising in the newsletter, please contact the newsletter editor Chris Sonderby, by telephone at 682-239-9657 via email at csonderby@ckconsultingsvcs.com

#### Newsletter Advertising:

Rates based on ad size and will include the following:

As a paid advertiser you will have your business card in the newsletter that will have a link to your Web page if you have a Web page.

As a paid advertiser you will have a hyperlink provided that will link to your Web page. Ads for the year will begin in the July 3rd Quarter issue and run through the following May issue.

All payments will be collected prior to the published issue –failure to make payments will result in the ad being pulled from further issues.

o Full page ASPE Member	\$375
o ½ page ASPE Member	\$275
o ¼ page ASPE Member	\$175
o Bus. Card ASPE Member	\$50

## The ASPE Code of Ethics

**Canon #1** - Professional estimators shall perform services in areas of their discipline and competence.

**Canon #2** - Professional estimators shall continue to expand their professional capabilities through continuing education programs to better enable them to serve clients, employers and the industry.

**Canon #3** - Professional estimators shall conduct themselves in a manner, which will promote cooperation and good relations among members of our profession and those directly related to our profession.

**Canon #4** - Professional estimators shall safeguard and keep in confidence all knowledge of the business affairs and technical procedures of an employer or client.

**Canon #5** - Professional estimators shall conduct themselves with integrity at all times and not knowingly or willingly enter into agreements that violate the laws of the United States of America or of the states in which they practice. They shall establish guidelines for setting forth prices and receiving quotations that are fair and equitable to all parties.

**Canon #6** - Professional estimators shall utilize their education, years of experience and acquired skills in the preparation of each estimate or assignment with full commitment to make each estimate or assignment as detailed and accurate as their talents and abilities allow.

**Canon #7** - Professional estimators shall not engage in the practice of "bid peddling" as defined by this code. This is a breach of moral and ethical standards, and this practice shall not be entered into by a member of this society.

Canon #8 - Professional estimators and those in training to be estimators shall not enter into any agreement that may be considered acts of collusion or conspiracy (bid rigging) with the implied or express purpose of defrauding clients. Acts of this type are in direct violation of the Code of Ethics of the American Society of Professional Estimators.

**Canon #9** - Professional estimators and those in training to be estimators shall not participate in acts, such as the giving or receiving of gifts, that are intended to be or may be construed as being unlawful acts of bribery.



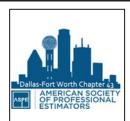
## Why ASPE? The Professional Network and Thought Leadership of Estimators worldwide.

The American Society of Professional Estimators serves residential, commercial and civil construction estimators by providing Education, Fellowship, and the opportunity for Professional Development. The proper Education, Ethics, Standards, Certification and Fellowship lead to the ultimate goal of Professionalism. Join today and contact us with any questions you may have about membership.

Share, Collaborate, Exchange and Grow.

If you submit numbers on bid day, then you belong in ASPE.





Who We Are

ASPE is a professional society which promotes the highest standards and ethics in the practice of construction estimating. We provide Continuing education through seminars and lectures on construction-related topics.

An opportunity to become recognized as a Certified Professional Estimator (CPE) through the completion of our training and testing program.

A means of personally communicating with fellow professionals on a monthly and annual basis, providing an opportunity to exchange information and gain professional recognition for yourself and your company.

Perhaps ASPE is the organization for you! Join Now