



Tools for Protecting the Bottom Line

By Mark Erdman, P.E.

Many engineering companies are experiencing financial challenges that place an even greater emphasis on the bottom line than normal. Even when times are good, business is brisk, and projects seem to be coming through the door with little effort, it can become easy to lose focus on best business practices, even those that directly affect the bottom line. Two of the latest tools released by the Council of American Structural Engineers (CASE) Toolkit Committee address aspects of firm management that have a significant impact on every engineering firm's financial position, specifically professional liability premiums and the development of appropriate fees for engineering services.



Tool No. 2-5

An article recently published by the *Insurance Journal* (March 19, 2013) shows that, for the second consecutive year, "the insurance market for architects and engineers continued its firming trend...as a number of leading insurance companies providing specialized coverage again achieved moderate price increases". The article also states that the majority of insurers expect to seek premium increases in the range of 4% to 8% this year, despite the overall number of claims remaining flat.

The focus of Risk Management Foundation #2 is to employ preventative techniques to assist design professional firms with maintaining sound risk prevention processes within the company. The committee has recently issued Tool #2-5: *Insurance Management: Minimize your Professional Liability Premium*. One of the primary strategic goals of the CASE Toolkit committee is to bring tangible value to member firms through increased recognition by the insurance industry, in particular professional liability insurance. This recognition can be used to decrease liability insurance costs, overall number of claims, and the severity of the claims filed.

Professional liability insurance premiums are one of the largest overhead expenses for structural engineering firms. The pricing for the insurance varies significantly depending on the insurance company, so it is hard to

argue against making every effort to obtain the best combination of coverage, premium, and value. Ironically, the insurance applications themselves leave very little space to provide details of the firm's practice that could positively impact the premium; it is as though the lack of space to fully describe the firm's practice is out of proportion to the importance and expense of the coverage that is provided. The application is the best and arguably only opportunity to demonstrate to the insurance company the details of your company and what differentiates it from others.

Tool #2-5 was designed as a guide to help the design consultant provide the information needed to get the best insurance premium. The tool was developed primarily with feedback provided by brokers and underwriters serving in the A/E community. They were asked: What supplemental information would you like to see incorporated into the typical application? What would you need to see in order to justify a reduction in premium?

Structural engineers are often times called upon to make decisions with incomplete information. SEs make reasonable assumptions, and call upon experience and expertise, and incorporate conservatism in order to compensate for a lack of information. Insurance underwriters are no

different. You have to actively demonstrate that your firm is serious about avoiding claims, and is a good risk. Like many aspects of managing a business, it is all about communication; they do not know unless you tell them. The more they are able to remove some of the layers of uncertainty and conservatism from their evaluation, the easier it is to justify a reduced premium.

The implementation of Tool #2-5 may not only reduce your company's liability premium, it might also reduce the overall number and severity of insurance claims for the industry as a whole.

Tool No. 7-2

Risk Management Foundation #7 pertains to Compensation, with a focus on preparing and negotiating fees that promote quality work resulting in successful projects that are profitable for the firm. The Committee's latest tool #7-2 *Fee Development* provides an outline for consultants to answer the question: How do we determine the fee for a project? Determining an appropriate fee for a project is a mixture of both art and science, and there is no better substitute for experience when it comes to figuring out the art component of a fee. The science component is easier to quantify and justify with available information, and therefore is the

focus of the tool. This tool is currently under review by American Council of Engineering Companies (ACEC) and will be available upon completion of the review.

Any attempt to determine the fee for a project should begin with a thorough examination of the scope of work. Itemizing the scope of work is the simplest and most direct way to project what resources will be required to perform the work, and the costs of those resources relate directly to the fee. Nailing down the scope can be difficult on larger projects with lengthy and complex schedules. One of the goals of the tool is to take uncertainties and turn them into quantifiable scope items by asking the right questions, analyzing historical data, and making reasonable assumptions. What are the Client's expectations for meetings? What is the Client's expectation for the firm's involvement during the preliminary approval phases? Are these variables effectively communicated in the proposal and reflected in the fee?

Another crucial element of fee development, and potentially the most important of all elements, is the assessment of risk. This assessment should include both design related and business related risks. No project is risk-free, and the list of potential risk

factors for a given project can seemingly be endless. A central point of the tool is to put the requisite thought into identifying potential risk factors so that the client understands the value and benefit brought to the project by the consulting engineer. Incorporating the risk factors into the fee development process reiterates to the owner that acceptance of increased risk warrants increased reward.

Historical data should be analyzed and referred to as part of fee development, both with respect to the Client, and also within the design firm. With regards to the Client it's important to look back and dig for trends in important factors such as payment timeliness, scope creep, and the overall experience of working together. That information should be used in combination with an analysis of the firm's database of past performance on similar projects. Fee development should consider the fees on past projects, a comparison of the scope of work to the new project, and a review of the performance on the past projects. Every project is unique. However, past performance can be a valuable indicator of future performance if applied appropriately.

Conclusion

Professional Liability Insurance premiums are on the rise, putting additional strain on bottom lines that may already be stretched thin. At the same time, fee development remains a challenging yet essential part of the structural engineering practice. Both situations can be effectively managed by understanding the perspective of the audience, understanding the risks involved, effectively communicating your firm's qualifications. ■

Mark Erdman, P.E., is an Associate Principal at the Baltimore, MD office of Structura, Inc. Mark has been serving as a member on the CASE Toolkit Committee since 2011. He can be reached at merdman@structura-inc.com.

The goal of The Council of American Structural Engineers (CASE) is to promote excellence in structural engineering business practices and risk management. The tools presented in this article were developed by CASE members who volunteer their time and expertise to advance the structural engineering profession.

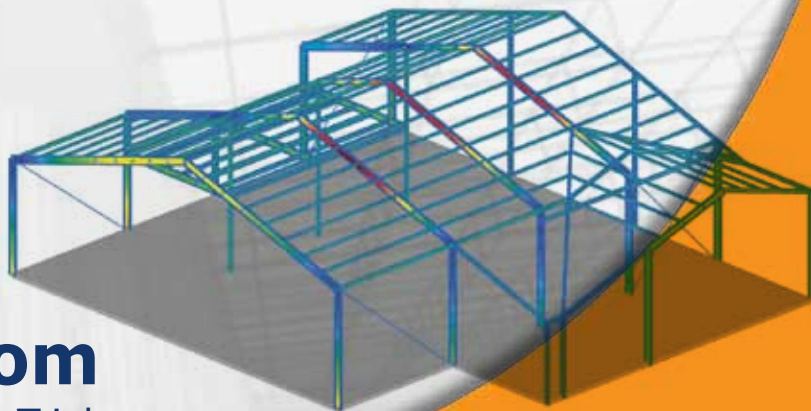
ADVERTISEMENT—For Advertiser Information, visit www.STRUCTUREmag.org



VisualAnalysis

Structural Software Designed for Your Success

- Easy to Learn and Use
- Analyze "Just about Anything!"
- Design: Steel, Wood, Concrete, Aluminum, and Cold-Formed



www.iesweb.com

Free 30-Day Trial

IES, Inc. | 519 E Babcock St. Bozeman MT 59715
800-707-0816 | info@iesweb.com

