

The Myth of Inadequate Structural Engineering Compensation

BY STAN R. CALDWELL, P.E., SECB

Seven tips for making the most of your chosen career.

LET ME START WITH AN admission. I make a very good living. I always have. It is probably more money than I need and more than I can reasonably spend, although my wife would certainly disagree. I am not unique. All of the licensed professional engineers that I associate with make more than \$100K, and I know dozens of structural engineers around the country that make more than \$200K. The idea that structural engineers are not well-compensated is simply a myth. Any structural engineer who puts his/her mind to it and focuses his/her efforts should be able to achieve annual compensation in the range of three times your age in thousands of dollars.

How about your compensation? Is it where you expected it to be? Is it where you want it to be? If not, go take a long look in the mirror. You are probably looking at the primary problem. The person you are looking at will need to make some changes. The changes might be uncomfortable, they might be difficult, and they might be unproductive. However, to quote an old saying, “nothing ventured, nothing gained.” You will never achieve what you do not attempt. If you really want to build wealth as a structural engineer, here are a few techniques that have worked for others, in no particular order:

1. Force yourself to become a rainmaker. Like it or not, sales people are the folks that keep the world turning. Learn to network far beyond your engineering comfort zone. Nurture friendship and respect with the people that make engineering procurement decisions. You will find them at church, at your kid’s soccer game, or at a charity event. They are far more receptive in those settings than during a cold call in their office. Once a friendship develops, you can eventually “talk shop.” Then, be prepared to offer something beyond your structural engineering expertise. Perhaps you know others who could help them put a



Stan R. Caldwell, P.E., SECB, is vice president and manager of the structures group of Half Associates, Inc., Richardson, Texas, and an AISC Professional Member.

project together. Perhaps you have dreamed up an original idea for a new project. All of this is unnatural behavior for most design engineers. Are you willing to humble yourself and earnestly seek out new projects before others become aware of them?

2. Force yourself to take calculated business risks. The old saying remains valid, “risk and rewards go hand in hand.” Have you ever considered being a part of a design-build team? I never liked design-build work very much and hoped that it would be a temporary phenomenon, but it is here to stay. My firm recently won its first big design-build award. Our part of the job is worth several million dollars, so my views are now changing. However, this was not our first or second design-build pursuit. Don’t be discouraged by failure, as it is an unavoidable stepping stone toward success. Are you willing to increase your risk tolerance and try new things?
3. Develop expertise in something that matters (not, for example, the optimal size of a fillet weld). Begin practicing a specialty that will distinguish you from the crowd. Niche markets will be a growth area in the future. You do not need to have a Ph.D. to become recognized as an expert, but once you are an expert you can name your price. In order to succeed, be sure to specialize in something that you really enjoy doing. Have you found a rewarding structural engineering specialty?
4. Stop working for architects! No one has ever built any real wealth doing that. Instead, swim upstream and work directly for the owner whenever possible. On many types of structures, no architect is required. Those projects are preferred. On building projects, strive to serve as the prime professional and have the architect work as your subcontractor. This is entirely legal, it is immensely satisfying, and it probably is what God intended. Are you ready to be the prime?
5. Aim high and aim long. Big fees generally result from large, complex projects. If you mostly design single family residences or strip retail centers, you should not expect big fees. However, much of what a structural engineer spends his/her time on is relatively fixed for every project and is more-or-less unrelated to size or complexity. Thus, the bigger the job is, the greater the opportunity

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is for profit. Do you consistently pursue progressively higher/larger/longer and more complex projects?

6. Decline every request to “bid” your services. Sell only on the basis of value. Clients that choose their professional consultants based on price are almost always lousy clients. If they do not value your participation, they do not deserve your time and effort. I have not knowingly quoted a fee to anyone in a competitive environment in more than 15 years. Why bother? If you are selling your services based on price, somebody else will always be cheaper. Embracing that mindset takes some time, but without it you will never be satisfied with your compensation. Do you have the discipline to stop bidding?
7. Last, but not least, routinely “fire” your bad clients. This includes your clients that have unreasonable expectations, those that are litigious, and those that repeatedly find excuses to dodge your invoices for as long as possible. Other, higher quality clients will eventually replace any void that the bad clients leave behind. Life is too short to put up with bad business. Do you have the courage to upgrade your clientele?

Now think about these techniques. If you like everything about structural engineering except for the compensation, you will need to make some changes in order to build wealth. As Albert Einstein famously pointed out, doing the same thing over and over again and expecting a different result each time is futile (he actually wrote “insane”). Your career is what it is, based almost entirely on your performance and your decisions. Nobody else is to blame. If you do not want to make any changes, that is just fine, as long as you also accept your current reality.