COURSE 8, TUTORIAL 1

BUDGETING BASICS

Many SBIR/STTR applicants underestimate the importance or difficulty of the cost proposal portion of their Phase I or II submission. Errors made here usually result in financial losses to the applicant, and reductions in the SBIR/STTR award amount, both of which are detrimental. Therefore, in this series of four Tutorials, we will introduce you to the basic concepts, terminology, and practices that should go into developing and defending your cost proposal. In this first Tutorial, we will answer some of the common questions that SBIR/STTR applicants have about the cost proposal and budgeting.

QUESTION 1

What is an "indirect rate" and where do I get it?

Answer: An indirect rate is a way to cover your general costs of being in business. This includes items such as rent, your electric bill, telephone and internet access. A client or customer, whether it is an SBIR/STTR agency or anyone else, should pay you for your actual costs of doing work for them, plus some additional money to cover your costs of being in business. This indirect rate is usually expressed as a percentage of the actual costs of doing work for a client (those are known as the "direct costs").

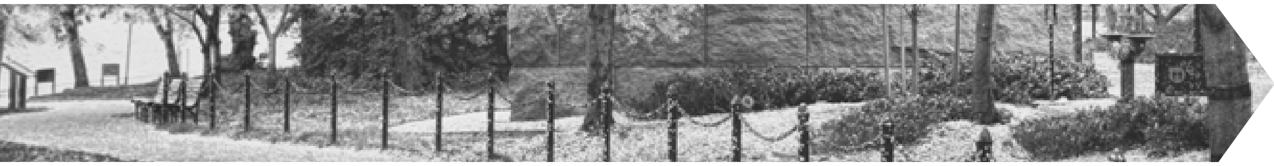
Each company has a unique indirect rate, based on its costs and how the company expresses them. You should NEVER use another company's indirect rate, because it doesn't reflect your costs and therefore is indefensible and inaccurate. Likewise, you should NEVER use a nearby university's indirect rate, because that institution has unique cost characteristics that are nothing like yours. Instead, you MUST derive your own company's unique indirect rate, which we will discuss in our third module in this series.

QUESTION 2

How do I determine wage and consultant rates?

Answer: You are allowed to charge "reasonable" rates. This vague term is defined as "what a prudent person in the conduct of competitive business would be willing to pay." So you are allowed to charge "reasonable" rates, based on your ability to defend them as being the rates that such a prudent person would pay.

So how do you prove "reasonableness?" Several suggestions: First, ask your trade or professional association if they do a periodic salary survey; if so, those rates are probably "reasonable." Second, go to http://www.bls.gov/bls/blswage.htm and look for salary estimates for various classes and categories of labor. Third, search for one of the private sector sources of average or typical labor rates, most of which are found online. Fourth, call several firms that employ similar workers (in terms of education, skills, and experience) and ask what they pay, and based your requested wage rate on the average. You may need to adjust these numbers if the cost of living in your area is particularly high or low relative to the national average.



Traditionally, companies have tried to argue that whatever rates were paid by other clients is a measure of "reasonableness." The argument is that those clients would not have paid those rates if they weren't "reasonable." There has been some push back by government negotiators on this measure, however, so if you use it, we recommend that you supplement it with one or more of the other sources listed above. Be prepared for a government negotiator, before giving you an SBIR/STTR award, to ask you to explain how you got one of the labor rates in your cost proposal and why you conclude it is "reasonable." This is very common in both Phase I and Phase II negotiations.

QUESTION 3

What percentage of the budget does the Principal Investigator (PI) typically receive in a Phase I project?

Answer: There are lots of variables that make this a very difficult question to answer. For example, is the PI the subject matter expert and will he or she do most of the work on the project? Or Is the PI just setting up the experiments, and then technicians will run them? Or is this an STTR where the PI is at the university/Federal Lab, and is making extensive use of students and postdocs to do the work?

There are, however, a couple of guidelines that we can offer here. First, make sure that the PI has enough involvement in the project, and enough budget to cover that involvement, so that it does not appear to be "window dressing." This term refers to situations where an SBIR/STTR applicant proposes a highly qualified and credentialed individual to serve as the PI, but then only gives them a token role in the actual project. This suggests you were "window dressing" with the PI rather than planning to really use their expertise in the project. Second, some agencies set minimums that a PI must contribute to the SBIR/STTR project. The Department of Energy (DOE), for example, says that the PI must contribute a minimum of 3 hours per week, on average, during the term of a Phase I project, and that goes up to 5 hours per week, on average, in Phase II. Therefore, in a 9 month DOE Phase I project, the PI must dedicate at least 117 hours to the effort. And NSF says that the PI must put in at least 1 calendar month of effort into a Phase I SBIR or STTR project. Please be sure to always review an agency's guidelines within the solicitation as periodically changes are made.

All agencies are required, by law to allow you a "reasonable" profit/fee on your SBIR/STTR project, but you have to ask for it in your cost proposal.

QUESTION 4

How much profit should I ask for?

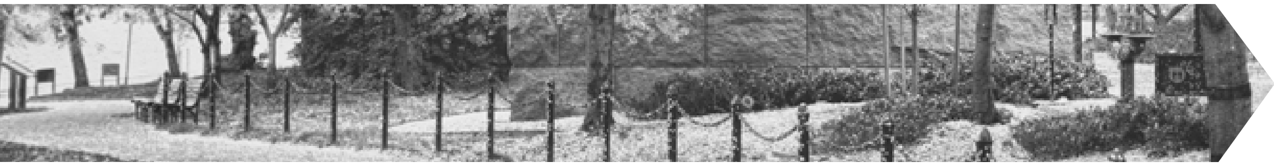
Answer: First, realize that most SBIR/STTR agencies don't call it "profit," but instead use the term "fee" (and NSF sometimes calls it "residual funds"). All agencies are required, by law to allow you a "reasonable" profit/fee on your SBIR/STTR project, but you have to ask for it in your cost proposal. The range is typically 7 to 11%. However, with the various budget constraints that have been experienced over the past several years, today the most commonly accepted fee is 7% .

A common mistake is to not ask for the maximum profit/fee, but just ask for a "gap filler" amount between your combined direct and indirect costs, and the total amount the agency will consider. For example, let's say your direct and indirect costs add up to $145,000, and the agency allows a maximum Phase I request of $150,000. Many applicants, erroneously, just as for a $5,000 profit/fee to fill this gap. Instead, ask for 7% profit or fee on your SBIR/STTR cost proposal. And in the budget justification, don't elaborate on how you plan to spend it, because it isn't relevant. What is relevant is that the law says you are entitled, under SBIR/STTR, to a profit/fee if you request it and it is "reasonable." Why? Because profit/fee is the most flexible money you will ever get from the Federal government. There are literally thousands of rules and regulations about how Federal government funds can be spent. Everything but profit/fee in your SBIR/STTR cost proposal is subject to such rules and regulations. But the only rules and regulations that apply to profit/fee is how much is "reasonable" for the government to give you—once you have that profit/fee in your pocket, you can do whatever you want to with it. So when you read about an SBIR agency not allowing certain expenditures, recognize that does NOT apply to how you use profit/fee. Profit/fee also can be used as contingency to cover unexpected costs, which are inevitable in the high risk R&D world of SBIR/STTR, or buy equipment, or file patents—you can use it for anything.

QUESTION 5

How do I scope an SBIR/STTR project to fit the budget?

Answer: Start with total maximum budget allowed by the agency. The current norm is $150,000, but some agencies are as low as $90,000 and others are as high as $225,000+. Then remove 7% to cover that profit/fee that we discussed above. Next remove the amount needed to cover a portion of your indirect costs (the cost of being in business), based on the indirect rate percentage that you will derive for your firm. What is



left over are the total funds available to actually do the Phase I R&D project, including your company's labor, materials, and travel, plus the total amount required by any subcontractors or consultants you plan to include on the project.

Here's an example of what this might look like. Let's start with $150,000 as the assumed maximum allowed on a Phase I proposal by the agency to which you plan to send your proposal. Set aside 7%, which is about $10,000, so now you have $140,000. You now remove from that amount the indirect cost as a percentage of all direct costs. That would remove about another $40,000, so you are now down to $100,000. That is your total budget for Phase I research project, including your company's labor, materials, project-related travel, and any subcontracts.

So if you thought you had $150,000 to do the Phase I project, you are incorrect. You actually only have $100,000, with the other $50,000 needed for indirect and profit/fee. Now scope the Phase I R&D effort to fit the "real" R&D budget of $100,000. Remember, you will need to modify this example by the indirect rate that we will help you estimate for your firm in the third module in this series.

The purpose of this tutorial was to answer some of the common questions that individuals have regarding financials. In the next tutorials we will explore the topics that have been introduced in more detail.

Never exceed the total award amount when generating your budget – your proposal will be rejected!