This tutorial will guide you through the development of budgets and budget justifications for proposals submitted to the National Science Foundation’s Advanced Technological Education Program, focusing specifically on the grant category called Small Grants for Institutions New to ATE. The information is based on a 2020 Mentor-Connect webinar, which is available as a recording in the Get a Resource section of the Mentor-Connect website (www.Mentor-Connect.org).

**Topics include:** entering correct information on the budget form, avoiding errors, preparing a budget justification, and recognizing the mutual dependence between the budget and the project description.

The key to developing a budget is to align it with the project’s scope of work. Funds in each budget category must be linked to the work discussed in the project description.

The budget forms are available on Fastlane (www.fastlane.nsf.gov).* Before you can access them and the other required forms, your administrator must register your college and the project’s senior personnel and acquire a college ID. (See the webinar handout for more information about registration.) Go to the Proposals, Awards and Status tab and log in using the college ID. Follow the instructions to get your personal ID and password.

Look for the name of your proposal under Proposal Functions/Proposal Preparation. It will appear if your administrator has provided it. Select it and click on Edit. If it does not appear, click on Create Blank Proposal and enter the required information. Either route will take you to a list of forms that is keyed to your proposal. Click on “GO” next to Budgets, as shown below.

*Mentor-Connect strongly recommends that you submit your proposal through Fastlane. Grants.gov is an alternative, but it does not provide all forms required for ATE proposals; it does not provide immediate feedback if your proposal is incomplete; and it does not adhere to the NSF deadlines, so a proposal submitted close to the deadline may be sent on to NSF after the deadline has passed. NSF will automatically return an incomplete or late submission without review. (Fastlane is in the process of being updated to a new website, Research.gov, but in 2020 proposals may still be submitted through Fastlane.)
Getting Started

Before you come to the budget forms, you will see the Project Budget Page, which looks like the illustration below. The name of your college will appear under Organization, and under Year you will see the number 1, for Year 1, and two options: Funds and Personnel.

Click on Personnel, and select the senior personnel who will be paid by the project in Year 1 from the list of potential project staff submitted by your administrator. (If you are not sure who will be included as senior personnel, have your administrator list all who might be included. This will avoid the delays of adding individuals at the last minute.)

The selected names will appear in Section A of the Year 1 budget form, as shown here. Note that only college employees may be listed in Section A. Others may serve as senior personnel, but they will be listed elsewhere in the budget.

Click on Funds to begin entering Year 1 expenses in the designated budget categories. (Only category A, senior personnel, is shown here but you will see all other categories on your screen.)

In addition to the Principal Investigator (PI) and Co-Principal Investigators (Co-PIs), senior personnel may include others in significant roles who are paid for project work. (Grant writers may not serve as senior personnel or other personnel, since NSF expects their work to be completed prior to funding.) All senior personnel must be registered in Fastlane, and all must have appropriate credentials for the proposed scope of work. Reviewers will examine their bio-sketches to assess their expertise.

IMPORTANT: The subtotals and totals are calculated in each section when you click on Calculate, but they are saved only when you click on Calculate and Save at the bottom of the page in Section L, Amount of This Request.

Once you have completed all sections of the Year 1 form, click on Go Back at the bottom of the form to return to the Project Budget Page. (Always use the Go Back function to return to previous pages. The familiar “go back arrow” at the top of your computer screen will take you out of Fastlane!) Then click on Add Year to begin working on Year 2. (You will see an option to copy a budget from one year to the next. Do so only if the annual budgets will be very similar, and be very careful to edit the copied budget as needed.)
Fastlane will use these working budget pages to generate the final budgets for each year as well as a cumulative budget for all project years. They will be formatted like the one below. We will review how NSF interprets each of the budget categories, so that you can plan and justify your budget accordingly.

### As you complete the annual working budgets:

**You will calculate costs for:**
- A. Senior Personnel
- B. Other Personnel
- C. Fringe Benefits
- D. Equipment
- E. Travel
- F. Participant Support
- G. Other Direct Costs
- H. Total Direct Costs
- I. Indirect Costs

**Fastlane will calculate:**
- J. Total Direct and Indirect Costs
- L. Amount of this request

Line item K was removed from this sample budget, since it refers to an item that does not apply to the ATE Program.

<table>
<thead>
<tr>
<th>Line item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>A. Senior Personnel: PI, Co-PI, Faculty and Other Senior Associates</td>
</tr>
<tr>
<td>2.</td>
<td>B. Other Personnel</td>
</tr>
<tr>
<td>3.</td>
<td>C. Fringe Benefits</td>
</tr>
<tr>
<td>4.</td>
<td>D. Equipment</td>
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<td>5.</td>
<td>E. Travel</td>
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<tr>
<td>6.</td>
<td>F. Participant Support</td>
</tr>
<tr>
<td>7.</td>
<td>G. Other Direct Costs</td>
</tr>
<tr>
<td>8.</td>
<td>H. Total Direct Costs</td>
</tr>
<tr>
<td>9.</td>
<td>I. Indirect Costs</td>
</tr>
</tbody>
</table>

The letters and headings that appear in the budget forms are significant. Use them in the same alphabetical and numerical order in your budget justification so that reviewers can easily compare the budgets and the information in the justification.

The NSF budget categories are likely to be different from those used at your college. Once funded, you will need to work with your business office to develop a clear crosswalk between the NSF budget categories and the college budget codes.
**A: Senior Personnel**

All project staff who are listed in this part of the budget (and in Part B) must work for your institution and be paid a project salary. Those who will be paid from your grant to work on the project but are not employed by the institution will be included in the Consultant Services budget category in Section G, or in a subaward.

NSF allows projects to have senior personnel who are not paid by the project, but they should NOT BE INCLUDED IN THE BUDGET. (Explain their roles in the project description and consider including them in the Facilities and Equipment Form, which may be used to explain unpaid support provided by college personnel.)

**Align project and institutional pay rates**

The amount you budget for an individual must be based on the current institutional compensation for that individual.

**Be cautious about overload**

If your institution has a written policy that permits overload for all faculty (not just the faculty working on funded projects), your senior personnel may receive overload pay for project work, but only to the extent that it conforms to that policy. Any budgeted overload must be described and the policy must be referenced in the budget justification.

**Be consistent and reasonable**

The time allocated to the project by senior personnel appears in the current and pending support forms, the budget, and the budget justification. Ensure that the information you provide is consistent!

Calculate reasonable estimates of the time required for all senior staff to accomplish their work, so that effort and compensation are balanced. Ensure that both the project description and the budget justification reflect this balance.

In many other NSF Programs, faculty are limited to two summer months for grant work. The ATE program has no such time restrictions, but it does require that workloads match the responsibilities explained in the project description. All costs, including personnel time, must be fully justified.

**Differentiate between calendar months, academic months, and summer months**

Personnel who have 9-month contracts must show project time during the academic year in academic months. If they also work on the project after the end of the academic year, they will show their time in both academic and summer months. Those who have 12-month contracts, usually staff rather than faculty, will show their project time only in calendar months. If your faculty have 12-month contracts, this must be explained in the budget justification.

In each case, the base for calculating monthly salary is the individual’s total annual salary.

- Monthly salary for faculty with 9-month (academic-year) contracts: divide the total salary by 9. (This salary applies to both academic months and summer months.)

- Monthly salary for faculty with 12-month contracts: divide the total salary by 12.

Once you have entered the months worked and the corresponding salaries, Section A will look something like this.
Determine the number of months each individual works

Time allocation may vary. One senior staff member may spend one day a week on the project; another may spend two days a week. Some may also work on the project in the summer, either full or part time. At some colleges, staff may have release time that equates to one course, or perhaps two courses. In each case, you must calculate how many months the time commitment represents. The examples below will show how this is done.

Example 1: The PI is a faculty member with a 9-month $54,000 academic year contract who has a separate summer contract. She will work on the project the equivalent of 1 day per 5-day week during fall and spring semesters and full time for two months in the summer. During the academic year, this work plan allocates 1/5, or 20%, of her time to the project. If she teaches five courses, this commitment would be equivalent to release time for one course. (Course loads can vary, so if your college requires that time allocation on your project is determined as release time, be sure to calculate the percentages and work-month equivalents based on your own faculty loading practices and pro-rate the budget request accordingly.

**Senior Personnel: Example 1**

$54,000 9-month academic year faculty contract; separate summer contract

<table>
<thead>
<tr>
<th>NSF-Funded Person-Months</th>
<th>CAL</th>
<th>ACAD</th>
<th>SUMR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.8</td>
<td>2.0</td>
<td></td>
</tr>
</tbody>
</table>

**How to budget for 1 day/week + 2 months summer work:**

- 1 day per 5-day week (or 1 course release where normal teaching load is 5 courses) = 1/5 or 20% of the person’s time = 20% of 9 months or 1.8 months, academic calendar (ACAD). 0.20 x 54,000 = $10,800
- 2 months full-time work on grant in summer = 2.0 months, summer (SUMR). $54,000/9 = $6000/month x 2 = $12,000
- Total annual budget request = $22,800

The time calculation gives us 1.8 academic months for the PI’s time in fall and spring semesters and 2 months for summer work. The total time is reported in both academic months and summer months, and the budget request is based on all months.

Example 2: This Co-PI is non-faculty college staff, with a $40,000, 12-month contract. Divide the annual salary by 12 to determine his monthly salary. His time commitment to the project will be 1 day per 5-day week year-round, or 20% of his time.

**Senior Personnel: Example 2**

$40,000, 12-month calendar year contract

<table>
<thead>
<tr>
<th>NSF-Funded Person-Months</th>
<th>CAL</th>
<th>ACAD</th>
<th>SUMR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**How to budget for 1 day/wk. year-round:**

- 1 day per 5-day week = 1/5 or 20% of the person’s time = 20% of 12 months or 2.4 months, calendar year (CAL). 0.20 x 40,000 = $8,000
- Total annual budget request = $8,000

First, determine the equivalent number of calendar months that he will work on the project. In this case, 20% yields 2.4 months. Then multiply the monthly salary by 2.4 to establish the budget amount per year.

The time is in this example is reported as calendar months.
Avoid mistakes! In the senior personnel section of your budget, do NOT enter:

- Percent of time worked instead of months
- Total months in which some time was spent on the project instead of full-month equivalents
- Both academic and calendar months for the same person
- Only the PI and Co-PIs, omitting other senior personnel who are employed by the college and compensated with grant funds
- Faculty not at your college
- Names without a corresponding dollar amount
- A PI without a time or dollar allocation (A PI who is not employed by the college should be listed in the budget under Consultant Services or in a Subaward budget.)

**B: Other Personnel**

The budget form identifies six categories of other personnel. Explain in the budget justification and the project description who these people are and what work they will perform. Your reviewers will examine this information carefully, since NSF does not require bio-sketches for other personnel. Note that, like senior personnel, other personnel must be college employees.

**Categories of Other Personnel**

- **Post-Doctorial Scholars**: Show person-months on the budget form. Not applicable to most ATE grants, since these scholars are generally based at universities for short-term studies or research.
- **Other Professionals**: Show person-months on budget form. Examples of other professionals include adjuncts to replace faculty working on the project, lab assistants, programmers, a webmaster, other technical support personnel, a project coordinator, and others in similar roles. Evaluators are usually listed in the budget under consultants, but they may be included as other personnel if they are employed by your institution.
- **Graduate and Undergraduate Students**: Show only total annual salary, usually paid at hourly rates, capped at 20 hours per week during the academic year and 40 hours per week in the summer.
- **Secretarial or clerical support**: Show only total annual salary. (May be calculated from an hourly rate for part-time employees.) Such support may be included only in very limited circumstances, since indirect costs are designed to cover this expense. To be eligible, such work must clearly support the project and be distinguishable from functions that are normally performed by the college.
- **Other**: Show only total annual salary. Use this category to identify personnel who do not fit into the categories listed above.

Follow the procedure you used to calculate senior personnel salaries. Remember to consider the type of contract each person has with the college.

For 12-month contracts, use only calendar months. For separate academic year and/or summer contracts, use those categories. For part-time secretarial, clerical and other staff, note the hourly rate in the budget justification.
C: Fringe Benefits

This category includes benefits like health insurance, life insurance, pension plans, and paid holidays.

These benefits are calculated as a percent of annual salary. Once you have entered all personnel salaries, calculate fringe benefits for eligible personnel and enter the total in this section of the budget form.

Note that you must include fringe benefits for all project personnel who receive them as part of their regular salary. Your college may not cover fringe benefits as an in-kind contribution. (Remember that NSF prohibits in-kind contributions.)

Who receives fringe benefits?

- Senior Personnel (PIs, Co-PIs)
- Other Professionals (adjunct faculty, technicians, programmers, etc.)
- Secretarial/Clerical Staff
- Undergraduates (in summer months only)
- Casual/Temporary Employees
- NOT graduate students

How will you calculate fringe benefits?

Your institution’s human resources department will be able to provide the correct fringe benefit rate. Multiply the annual salary for each person by that rate to get the dollar amount of the fringe benefits. Pro-rate the amount, according to the percent of time that is supported by the grant. (If ten percent of an annual salary is supported by the grant, include ten percent of that person’s fringe benefits in the budget.) Total all fringe benefits and enter the amount. When you click on Calculate, Fastlane will add salaries and fringe benefits for all project personnel.

Be sure to explain your calculations in the budget justification!
**D: Equipment**

In this section, you will list any necessary equipment with acquisition costs of $5,000 or more. Factor in the cost of shipping and any necessary modifications, attachments or accessories. (A piece of equipment that costs $4,000 would be listed here if these additional costs bring the total to more than $5,000.)

Note that:
- All equipment and instrumentation purchases must be:
  - Necessary to support your grant activities
  - Not otherwise available and accessible
  - Acquired in accordance with your college’s normal practices
- All equipment purchased with grant funds must have a service life of over one year.
- If your college classifies equipment differently than NSF, you must use the NSF definition. For example, your college may consider laptop computers to be equipment. However, if laptop computers purchased for use in your project cost less than $5,000 each, they are budgeted as Materials and Supplies rather than as Equipment.
- NSF funds may not be used to support costs that would normally be incurred if you did not have a grant, such as laboratory upgrades, routine instructional needs, or general utility items such as office equipment and office furniture.
- Your budget justification must explain why the project needs each item of equipment, how it will be used, and by whom.
- There is no maximum limit on equipment expenditures, but they must be reasonable in relation to your total budget. For small New-to-ATE grants, equipment costs should not dominate the budget. Look for educational discounts whenever possible.
E. Travel

Include only travel by project staff that is necessary to:

- Accomplish project objectives
- Disseminate project results (such as attendance at workshops, meetings, or conferences - including the annual ATE PI Conference in Washington D.C.)

Restrictions

- This budget category is NOT for travel by consultants, national visiting committee members, advisors, speakers, or participants. Travel costs for paid consultants, speakers, and advisors are included in their fees or budgeted under Other Direct Costs. Travel and subsistence for participants should be budgeted in the Participant Support budget category.
- You must book the most economical form of travel, such as economy class airfare.
- If your project objectives require foreign travel, you must travel on U.S. carriers if they are available. (For budgeting purposes, travel to Canada, Mexico, and Puerto Rico is considered domestic travel.)
- For mileage rates and per diem restrictions, use the guidelines established by your college. NSF expects your budgeted travel allowances to be consistent with your institutional policies.
- Never use federal funds for alcoholic beverages or entertainment!

Explaining travel expenses

Explain all travel expenses, based on careful estimates of anticipated costs, in the budget justification. For travel to conferences, find reasonable current hotel rates and airfares, and estimate the increases in those costs by the time of the conference. Be sure to budget for meals, ground transportation, and other predictable costs at affordable rates.

ATE PI Conference Costs

Your travel budget must include the costs of attending the annual ATE Principal Investigators Conference, held in Washington DC every October. ATE will provide your project with two complementary registrations and two hotel rooms for two nights. Your project budget covers the costs of travel and of meals not provided by the conference. Should you need to spend extra nights at the hotel to accommodate travel to or from the conference or to arrive early for a pre-conference workshop, the additional cost is allowable but must be explained and budgeted in your proposal.

Additional participants: Your college may send up to three additional people to the conference, but you may not cover their costs from your project budget. The costs for additional participants must be covered by your college or other another funding source. Costs will include conference registration, travel, lodging, and meals not provided during the conference. The following registration and hotel costs apply to the 2020 conference:

- Registration fee: $400/person
- Conference hotel: $268/night (In order to reserve rooms at this discounted rate, participants must specify that they will be attending the National Science Foundation ATE Principal Investigators Conference, organized by the American Association of Community Colleges.)
F. Participant Support Costs

If you plan to offer conferences, meetings, training workshops, or other short-term instructional or information-sharing activities as part of your project, the costs to support participants or trainees at those events will be budgeted as participant support. Participants are not project employees. They are individuals, not usually at your institution, who receive services or training provided by your project. They can be required to complete training activities and provide input in order to be eligible for stipends and/or travel support. If faculty are the participants in such events, it is important to explain in the project description how the experience will impact their students. Remember that travel costs for project staff who participate in such events are not listed in this budget category, but in category E, Travel.

Participant support spans four categories: stipends, travel, subsistence, and other related expenses. Enter the total cost in each category on the form and enter the number of participants.

These costs must add value to your project. They must be reasonable, and they must be explained in the budget justification.

F. Participant Support Costs

<table>
<thead>
<tr>
<th>Description</th>
<th>Costs</th>
<th>Funds Requested By Proposer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Stipends</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Travel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Subsistence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Other</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Number of Participants: [ ]

Total Participant Support Costs: $0

IMPORTANT: You may not transfer funds among line items within this budget category or move funds into or out of this category without approval by your NSF Program Officer. A request for approval, with an explanation of your reasoning, should be made in Fastlane under Notifications and Requests. Having an email or telephone conversation with your Program Officer is advisable prior to submitting a request.

How will you calculate participant support costs?

- **Stipends:** High school teachers and students normally receive daily stipends while participating in project activities, while college faculty may or may not receive stipends. Determine the amount that each participant will receive per day and multiply it by the number of days and the number of participants.

- **Travel:** Research the anticipated travel costs for participants who will attend your events/activities. Select economical and direct-route options. Explain the purpose of the travel and your cost calculations in the budget justification. Remember that this travel line item is for participants only.

- **Subsistence:** Estimate the cost of meals (without alcoholic beverages) and/housing per person per day and multiply it by the number of days and the number of participants. If meals or lodging are furnished without charge or at a nominal cost to the participants, you must reduce the subsistence amount accordingly. (For example, if breakfast and lunch are included as part of your training activity, you may only reimburse the participants for the costs of dinner.)

- **Other:** List any other expenses incurred in supporting the participants, and explain how these expenses are relevant and necessary to the event or activity (e.g., printing of workshop materials, classroom kits, devices, software, etc. that support implementation).
G. Other Direct Costs

Other direct costs include expenses for Materials and Supplies; Publication, Documentation and Distribution; Consultant Services; Computer Services; Subcontracts; and other expenses necessary to carry out your project. Enter the total for each of these categories in Section G and itemize them in the budget justification.

<table>
<thead>
<tr>
<th>Description</th>
<th>Funds Requested By Proposer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Materials and Supplies</td>
<td>0</td>
</tr>
<tr>
<td>2. Publication Costs/Documentation/Distribution</td>
<td>0</td>
</tr>
<tr>
<td>3. Consultant Services</td>
<td>0</td>
</tr>
<tr>
<td>4. Computer (A/PE) Services</td>
<td>0</td>
</tr>
<tr>
<td>5. Subcontracts</td>
<td>0</td>
</tr>
<tr>
<td>6. Other</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Other Direct Costs:</strong></td>
<td><strong>$0</strong></td>
</tr>
</tbody>
</table>

Materials and Supplies

- Materials and supplies include necessary project-specific items. Equipment that costs less than $5,000 is included in this category, while equipment costing more than $5,000 is listed under D, Equipment. (If 60 handheld GPS units cost $100 each, the $6,000 total cost would still be budgeted under Materials and Supplies since the individual cost per unit is under $5,000.)
- Materials and supplies may include items such as lab chemicals and project-specific office supplies. NSF does not permit purchase of office furniture or general office supplies that are not used exclusively for the project.

Publication, Documentation, and Dissemination

The grant may cover costs related to documenting, preparing, publishing, and sharing research findings and materials developed by the project. Examples of these activities may include storage and indexing of data and databases; website development; page charges for publications in journals; production of posters and exhibit materials, printing of sample materials, etc. (Note that you will be required to develop an exhibit for the annual ATE PI Conference. You may not need a new exhibit each year, but you will want to incorporate updates as your project progresses. You may also want to have handouts available.)

Consultant Services

Consultants are contractors who are paid a fee for services to the project. They are listed in the budget under other direct costs in the consultant services line item, even if they are considered project personnel. The project description must explain their contributions to the project, and that information must be aligned with the consulting expenses described in the budget justification. Include the names and affiliations of any consultants in both places. Provide detailed job descriptions if the individuals have not yet been identified. Note that consultants’ rates of compensation are based on their regular rates of pay.

- The budget justification must include specific information about the consultants’ time commitments to the project and their compensation. For example: a $6,000 expense might consist of 10 days @ $500 a day plus $1,000 for travel expenses, or 60 hours at $80 per hour plus $1200 for travel expenses. Individual costs making up travel expenses should be detailed (e.g., mileage, airfare, lodging, meals).
- An external evaluator is normally budgeted as a consultant, but projects may elect to fund evaluation expenses through a subaward, especially for larger projects. Across the ATE Program, proposals allocate about 7% of the project budget for evaluation. The range is typically 5-8% and varies with the size of the overall budget and the complexity of the evaluation plan. For consultants, only costs for time and travel may be included. See the EvalUATE videos in the Get a Resource section of the Mentor-Connect website (www.Mentor-Connect.org) for more information about evaluation expenses.
Computer Services
- The cost of computer services may be included in your budget ONLY if your existing institutional policy is to bill computer services as direct costs and, if provided by the institution, only at your college’s established computer service rates.
- Computer services may include computer-based searches for data and other information.
- General-purpose computer equipment and software are not allowable expenses.

Subawards
- Subawards are used to fund a discrete portion of work that is carried out by another organization. Most subawards are part of relatively large projects. They are seldom included in projects funded by the Small Grants for Institutions New to the ATE Program.
- Organizations that receive subawards must register in Fastlane and identify their own PI, Co-PI(s), and other staff who will work on the project. They must also develop their own budget and budget justification.
- The subcontracting PI is responsible for the work proposed in the subaward and for management and oversight of the subaward budget. However, the primary institution – your college – is ultimately responsible for all project work, including that conducted as a subaward.
- In the main budget form, you will list only the total annual subaward costs. The budget justification must include details about the subaward budget, *including indirect costs at the subawardee’s negotiated rate*; a description of the work to be performed; and a clear explanation of the basis for selecting the subawardee.

Other Direct Costs
Any direct costs not previously identified must be included here and itemized in the budget justification. Examples include materials and supplies for work conducted in offices or labs; meeting costs, such as conference registration fees; costs associated with preparing exhibits or presentations; or travel expenses for national visiting committee members and advisors who are not paid for their time. (Note that only ATE Centers are expected to have national visiting committees.)

H. Total Direct Costs
When you have entered all costs in Sections A through G, click on *Calculate* in Section H for the total amount of all direct costs.

![H. Total Direct Costs](image)
I. Indirect Costs

Every institution receiving a grant from NSF must include indirect costs in the budget. This money from the grant helps support the business operations and other functions of your institution. Ask your business office whether your college has established an indirect cost rate and if so, what the current rate is. (Indirect costs rates can change over time, so you need to be certain that the one used in your proposal is current.) The rate that is in place when your grant is awarded will apply for the life of the grant, even if the college negotiates a different rate during that time. Note that the full indirect cost rate must be applied in your budget. An institution that offers to accept less than the current rate in order to provide more funds for project work will be engaging in cost-sharing, which is prohibited by NSF. Also note that subawards have their own budgets and their own indirect cost rates.

Some colleges have a higher on-campus indirect rate and a much lower off-campus indirect rate. If this is the case at your college, ask whether any of your activities qualify for the off-campus rate. (NSF allows the colleges to determine how these rates are applied.)

NSF does not restrict the ways in which colleges allocate funds received as indirect costs. You may be able to negotiate for some of those funds to be used to support the project, for example with staff salaries or equipment. This can be valuable if your indirect rate is so high that it makes it difficult to accomplish your goals.

How are indirect costs calculated?

Your college’s indirect cost rate is a percentage of either:

- personnel costs (salaries and fringe benefits) or
- allowable operating costs (all costs minus participant support, equipment, and subawards over the first $25,000).

This category is also called Total Modified Direct Costs.

The dollar amounts of the personnel costs or the allowable operating costs are the “base” for the calculating the dollar amount of your indirect cost. List the items on which the indirect costs are based (either salaries and fringes or each of the allowable operating costs). Next to each item list the indirect cost rate as a percentage (20 for 20%, etc.). Then use that percentage to calculate and enter the base dollar amount for each item. Clicking on Calculate will automatically generate your total indirect costs.

What if your college does not have an indirect cost rate?

Your business office may apply for a rate, but not until your grant proposal has been recommended for funding. (The college will then be referred to the U.S. Department of Health and Human Services to negotiate the rate.) The base for your indirect costs will be determined at that time. This indirect cost rate will not, however, apply to your current grant proposal, but only to future proposals. For this proposal NSF requires that you develop your budget with the de minimus indirect rate, which is calculated as 10% of the allowable operating costs (also called the Total Modified Direct Costs). Note that the college may choose not to apply for a negotiated indirect cost rate. The de minimus rate may be used indefinitely for future projects.

IMPORTANT: Pay close attention to the impact that indirect costs have on your project budget. They must be included in the total amount of the grant request. For a “New-to-ATE” grant, your maximum allowable funding is $300,000. If adding indirect costs increases your request beyond that amount, your proposal will automatically be reviewed in the “ATE Projects” category, which is far more competitive. This would significantly diminish your chances of being funded.
J. Total Direct and Indirect Costs

We are getting to the bottom line!

When you click on Calculate, the system will automatically determine your total Direct and Indirect Costs.

K. Small Business Fees

This budget category is not applicable to NSF ATE grants.

L. Amount of this request

The amount of your request will be the same as the total of Direct and Indirect Costs. It will be calculated for you when you press Calculate & Save. Your Year One budget is now complete!

Finalized Budget

When you have repeated this process for Years Two and Three, Fastlane will produce a concise budget for each year as well as a cumulative budget with the three-year totals for each budget category. (Make sure the cumulative budget does not exceed $300,000 for a Small Grant for Institutions New to ATE.) All four budget components will be in the same format as the cumulative budget on the next page.
## SUMMARY PROPOSAL BUDGET

<table>
<thead>
<tr>
<th>Organization</th>
<th>COMMUNITY COLLEGE</th>
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<tr>
<td>PI</td>
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<td>Co-PI</td>
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<td>UNDERGRADUATE STUDENTS</td>
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<td>TRAVEL</td>
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<tr>
<td>AGREED LEVEL</td>
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**For NSF Use Only**

- INDIRECT COST RATE VERIFICATION
  - Date: [ DATE ]
  - Initials: [ INITIALS ]
BUDGET JUSTIFICATION

Since the budget form does not allow you to provide details about WHY you are requesting funds, you must prepare a budget justification for this purpose. It is a separate document that explains your expenses for each year of the project. Note that each expense must have a purpose that is tied to the project description. You are allowed up to 5 pages (which are not counted toward other page limits in the proposal). Remember that subawards have their own budgets and budget justifications.

NSF does not require a specific format. It is strongly recommended that you organize your budget justification according to the A through I sections of the budget form, using these letters and the corresponding budget categories. For example, “A” for Senior Personnel and “E” for Travel. If you are not requesting money in a category, just list the letter and indicate not applicable with “N/A.”

Once you have completed the budget justification, you will upload it by clicking on Budget Justification on the Project Budget Page and following the upload instructions. It is a good idea to convert all documents to pdf files before uploading. This is not a requirement, since Fastlane will convert uploaded Word documents to pdf, but making your own conversion allows you better control of formatting issues. (After uploading, check to make sure that the formatting remains correct, not just on the screen but also in printed form.)

Carefully align activities and corresponding budget amounts

- Ensure that the budget and project description are mutually supportive. Expenses must be discussed in the project description as well as explained in greater detail in the budget justification.
- Request funds for specific purposes and provide logical reasons for those expenditures.
- Research your costs so that you can be very specific about the amounts of money that are needed and for what purpose. Do not request funds for “etc.” or unspecified expenses.
- Be economical - avoid high-cost expenses when possible and take advantage of educational discounts.
- Remember that NSF requires low-cost travel options (such as economy rather than business-class airfares) and prohibits expenditures on entertainment and alcoholic beverages.

Useful tips

Your reviewers will be looking for answers to questions like:

- How much money do you need for each budget item?
- If a total is made up of several costs (e.g., air fare, lodging, meals) how much is being requested for each component of the total cost?
- For whom do you need funds? Personnel, participants, consultants?
- What will these people do to contribute to the project? With what compensation? Over what period of time?
- What items do you plan to purchase and why? How will items or equipment be used in a project activity to benefit students or participants?

Avoid mistakes! Most common budget justification errors:

- Too short to adequately explain expenses or longer than the allowable five pages
- Hard to follow (Use the budget form categories to avoid this problem!)
- Time, rate, and responsibilities not provided for consultants
- Time for personnel not justified or incorrectly calculated
- Overload pay for full-time faculty not clarified (Institutional overload policy must be explained.)
- Items in Materials and Supplies category not clearly identified (Avoid the appearance of a slush fund!)
- Part-time faculty included as consultants or participants (instead of other personnel)
- The Travel line is not restricted to senior personnel; travel needs are not adequately explained
Sample Budget Justification
Below you will find an example of a narrative budget justification, with paragraphs created to describe costs. Note the use of the same letters and headings as those on the budget form.

Budget Justification

Comprehensive Community College (CC Tech) is requesting $199,896 from the National Science Foundation over the course of a three-year Small Grants for Institutions New to ATE Program. CC Tech asks for $68,911 in year one; $67,305 in year two; and $63,380 in year three.

Grant funds will be used in the following manner:

Personnel (year 1=$29,846; year 2=$31,015; year 3=$27,380; total=$88,251)

A. Senior Personnel
In each year of the grant, the PI, Peter Smith, will receive four class reductions (two classes each fall and spring semester) in order to devote time to implementing the grant project. Three Co-PIs will each receive three class reductions (one each fall, spring, and summer semesters) to work on the grant in all three years of the project. Part time faculty will be hired to make the release time possible. (See Other Personnel, below.) The focus of each Co-PI is listed below:

Sally Morgan: Recruitment of females
Marie D’Ablo: Implementation of existing PBLs within the Networking, Information Security, and Computer Information Technologies programs
Frank Cheung: Implementation of existing PBLs in the Civil Engineering Technology, Computer Engineering Technology, Electronics Engineering Technology, Mechanical Engineering Technology, Surveying Technology, and Sustainability Technology programs

B. Other Personnel
Part time faculty will be paid with NSF funds to provide classroom instruction for the PI and Co-PIs. Each of the classes covered by part time instructors is worth $1,904 in the first year. A 2% increase has been included for Years 2 and 3. (Year 1=$24,752; Year 2=$25,095; Year 3=$25,244; total: $75,291)

Full time instructors will attend the workshops during monthly scheduled work time. However, adjunct instructors are a critical part of the faculty. Adjunct instructors will be given a stipend of $100 for each day of attendance at the workshop. This is estimated at four two-day workshops over the first two years of the grant for 9 instructors (4 in Year 1 and 5 in Year 2). (Year 1=$3,200; Year 2=$4,000; Year 3=$0; total=$7,200)

C. Fringe Benefits
FICA benefits for part time instructors equal 7.65%. (Year 1=$1,894; Year 2=$1,920; Year 3=$1,946; total=$5,760)

D. Equipment
N/A
E. Travel (Year 1=$10,090; year 2=$10,090, year 3=$10,090; total= $30,270)

In each of the three years of the grant, the PI will attend the ATE PI Conference and Hi-Tec or similar conferences. The Co-PIs involved in Problem-Based Learning will attend one conference per year (ATE, High-Tec, or a similar conference). The costs are estimated to include:
$450 air fare; $50 baggage fees; $75 ground transportation; $750 hotel (at $250 per night for a 3-day conference); $150 per diem; $350 registration. The total cost per person per conference is $1,825. (Year 1=$7,300; Year 2= $7,300; Year 3=$7,300; total= $21,900)

The PI and one Co-PI will make two two-day trips each year of the grant project to the SC ATE Center for assistance with grant project implementation. Travel funds will cover:
Hotel accommodations ($150 x 1 night x 2 people=$300, per diem ($75 x 2 days x 2 people=$300), and gas mileage ($180). Each trip will cost $780 x 2/year=$1,560. (Year 1=$1,560; Year 2= $1,560; Year 3= $1,560; total= $4,680).

SC ATE offers workshops on a regular basis. Funding for 2 people to attend the training per year has been included. Travel funds will cover:
Hotel accommodations ($150 x 2 nights x 2 people=$600), per diem (($75 x 3 days x 2 people=$450), and gas mileage ($180). Each trip will cost $1,230 x 1 year=$1,230. (Year 1=$1,230; Year 2=$1,230, Year 3=$1,230, total= $3,690)

F. Participant Support (year 1=$1,875; year 2=$5,875; year 3=$5,875; total= $13,625)

1. Stipends
Each secondary school employee who attends the Innovative Education Expo will receive a stipend of $100. Approximately 30 participants will attend each summer. (Year 2=$3,000; Year 3=$3,000; total=$6,000)

2. Travel
Ambassador students will be encouraged to apply for a scholarship to attend the ATE Conference. If awarded, the grant will pay for costs not covered by the scholarship. (Year 2=$1,000; Year 3=$1,000; total=$2,000)
Fifteen female students per year will be engaged as Ambassadors with a stipend of $125 each.
Ambassadors will assist with the Females in Technology group, career fairs, and campus tours. (Year 1=$1,875; year 2=$1,875; year 3=$575; total= $5,250)

G. Other Direct Costs

1. Materials and Supplies (year 1=$4,100; year 2=$4,325; year 3=$4,325; total=$12,750)
- Necessary materials and supplies include a display board to be used for conference and other presentations, promotional items, printing costs, postage, thumb drives, and banners. (Year 1=$4,100; Year 2=$575; Year 3=$575; total=$5,250)
- For the Innovation Education Expo held in Years 2 and 3 of the grant, participants from each of the 10 feeder high schools to the CC Tech Campus will learn about both the campus and the opportunities for females in STEM-related programs falling within the scope of the grant. Costs for supplies, marketing and refreshments (Year 2=$3,750; Year 3=$3,750; total=$7,500)

2. Publication Costs/Documentation/Dissemination
N/A
3. Consultant Services
   - CC Tech will contract with a professional marketing person to develop materials for recruitment. (Year 1=$4,500; total=$4,500)
   - CC Tech will contract with a social media consultant to provide the Social Media Presence using the marketing materials developed by the marketing consultant. (Year 1=$1,500; total=$1,500)
   - The external evaluator, SC ATE, Inc., will provide external evaluation services for $8,000/year with cost estimates/year as follows:
     - 9 days professional services time/year at $600/day, $5,400 (on-site work, travel time, data collection/analysis, report writing, electronic/phone communications); 2 site visits/year to conduct evaluation activities at $544/trip, $1,088 ($280 mileage, $130 lodging, $100 meals, $34 misc. travel expenses); SC ATE Inc. management fee (28% of salaries and fringes), $1,512. (Year 1=$8,000; Year 2=$8,000; Year 3=$8,000; total=$24,000)

4. Computer Services
   N/A

5. Subawards (none)
   N/A

6. Other (Year 1=$23,000; year 2=$16,000; year 3=$16,000; total=$55,000)
   - A workshop for faculty on promoting gender equity in the classroom will be held in the first year. For the second and third year, Sally Morgan and Marie D’Ablo will develop the training. (Cost of speaker, Year 1=$1,000; total=$1,000)
   - SC ATE Center trainers will present workshops (use of PBLs in the classroom and adaptation of PBLs throughout the course of the grant project). Funds will be used to pay contract fees for SC ATE trainers to lead three 2-day professional development workshops. (Year 1=$8,000; Year 2=$8,000; Year 3=$8,000; total=$24,000)