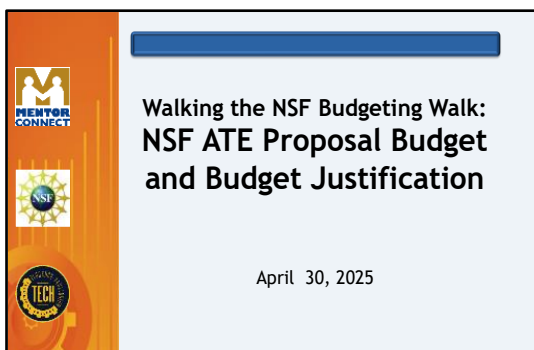


Preparing Forms for Your ATE Proposal: Part 2

Budget and Budget Justification



*Costs related to the Personnel categories (A, B, and C) will be covered in the May 21 webinar
Please use the Quick Reference Guide for that webinar to view items related to personnel.*



This Quick Reference Guide will help you develop the Budget and the Budget Justification for your proposal to the National Science Foundation's Advanced Technological Education (ATE) Program.

It is based on a webinar presented on April 30, 2025 by Mentor-Connect project personnel Pamela Silvers (PI), Emery DeWitt (Co-PI), Louis McIntyre (Senior Personnel), and Matthew Swenson (Mentor Fellow Lead).

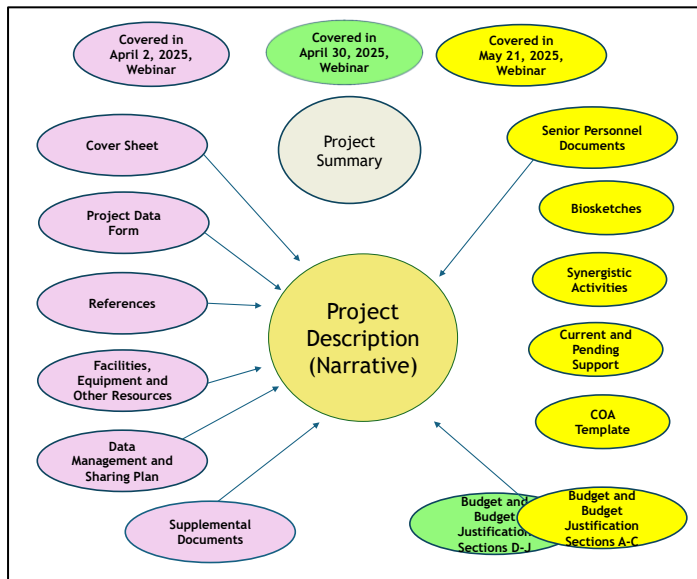
The webinar is available as a recording in the Mentor-Connect Resource Library (www.Mentor-Connect.org). This Quick Reference Guide, also available in the Resource Library, provides the information presented in the webinar in an easily accessible print format.

The Budget and Budget Justification are two of the forms that are part of an ATE proposal. The other forms, shown here in purple and yellow, are the topics of separate webinars:

April 2: Preparing Forms for Your ATE Proposal: Part 1 addressed the forms shown in purple.

May 21: Part 3 will address the forms shown in yellow and one remaining Budget topic, Personnel Direct Costs.

Recordings and Quick Reference Guides are/will be available in the Resource Library.



You will use an online platform to submit your proposal. Mentor-Connect strongly recommends using Research.gov, which meets the specific needs of ATE proposals. Access to Research.gov and the rationale for using it were covered in the April 2 webinar. Please see the Quick Reference Guide for that webinar for detailed information and instructions. (https://library.mentor-connect.org/r576/quick_reference_guide_2025_preparing_forms_for_your_nsf_ate_proposal_part_1)

The budget form is a template in Research.gov. You will use it to list your expected costs for each year of your project. Research.gov will then generate a completed budget form for each project year, as well as a cumulative budget form, with totals calculated automatically by category.



These forms constitute your Budget. You will also submit a Budget Justification, which explains why each expense is relevant to your project and provides detailed information about the expenditures in the budget forms (including, in some cases, how an amount was calculated). The Budget Justification is not a template, so you will develop it “from scratch” and upload it as a separate pdf document.

Accessing the Budget Form

You must be registered in Research.gov before you can access the budget form. If your college is not already registered, have your Authorized Organizational Representative (AOR) acquire a college ID and register the college and all senior personnel. If you are not sure who will be included as senior personnel, have the AOR register all who *may* be included. This will avoid the delays if you need to add individuals at the last minute.

Follow these steps to get to the budget form:

- Log in at Research.gov
- Select Proposals on the opening screen.
- Click on the tabs to indicate that you plan to prepare a new proposal, and that it will be a full proposal.

This will take you to the Control Page, and from there you can access all parts of the proposal.

Click on the Budget(s) tab and you will come to a screen which has the name of the grantee organization – i.e. your institution – and the name of your Principal Investigator.

Click on Manage Personnel and Subaward Organizations and you will see your institution's unique identifier number (UEI), address, the PI's name, and a hot link for managing personnel information.

Click on the tab with the name of your institution to access the budget form, part of which is shown here.

Proposal Actions	Proposal Sections	Last Updated	Compliance Status [Key]
Share Proposal with SPO/AOR Manage Personnel and Subaward Organizations Print Proposal Delete Proposal	Required Cover Sheet Project Summary Project Description References Cited Budget(s) Budget Justification(s) Facilities, Equipment and Other Resources Senior Personnel Documents		Form not checked Document unavailable for check Document unavailable for check Document unavailable for check Form not checked Document unavailable for check Document unavailable for check Document unavailable for check
Proposal Details			
Proposal Status:			

Budget(s)

Manage Personnel and Subaward Organizations

Prime Organization			
Budget for:	Principal Investigator	Total Requested Amount	Compliance Status [Key]
Florence-Darlington Technical College	Pamela J Silvers	\$0	Form not checked

Subaward Organization(s)		
Budget for:	Subaward Requested Amount	Compliance Status [Key]

Budget (Prime Organization)

For Florence-Darlington Technical College

\$0
Total Requested Amount

Video: How to Work on a Proposal Budget

Expand all rows | Collapse all rows Years in Budget: 1 Add Year Delete Year

Personnel Direct Costs				
Section	Year 1			Total Funds Requested
	# Personnel	Months	Funds	
A. Senior Personnel [Manage]	1	0.00	\$0	\$0
Pamela J Silvers (PI)		0.00	\$ 0	\$0
B. Other Personnel	0		\$0	\$0
Postdoctoral Scholars	0	0.00	\$ 0	\$0
Other Professionals	0	0.00	\$ 0	\$0
Graduate Students	0		\$ 0	\$0

After completing and saving the form for Year One, click on Add Year to access a blank form for Year Two. Complete and save that form and follow the same process for Year Three. (NSF does not require three-year budgets, but Mentor-Connect advises against submitting a two-year budget even if your project is relatively small. Having three years to complete your work will allow for unexpected delays.)

Budget (Prime Organization)
For Florence-Darlington Technical College ⓘ

\$0
Total Requested Amount

Video: How to Work on a Proposal Budget

Expand all rows | Collapse all rows Years in Budget: 1 **Add Year** Delete Year

Personnel Direct Costs				Total Funds Requested
Section	Year 1			
	# Personnel	Months	Funds	
A. Senior Personnel [Manage]	1	0.00	\$0	\$0
Pamela J Silvers (PI)	0.00		\$ 0	\$0
B. Other Personnel ⓘ	0		\$0	\$0
Postdoctoral Scholars ⓘ	0	0.00	\$ 0	\$0
Other Professionals	0	0.00	\$ 0	\$0
Graduate Students	0		\$ 0	\$0

Add Year ✕

Add a new year to the budget by choosing a selection below.

Add New Year

☐ Add Blank Year

☐ Copy from an existing year

Select year to copy

--Select One-- ▾

Add Year **Cancel**

Realistic budgets are rarely identical from year to year, since activities and associated costs typically change as the project progresses. However, should an annual budget be very similar to that of a prior year, you may choose to have the costs transferred to the new budget form. If you do this, be very careful to make any edits that are applicable to the subsequent year's work and to keep each budget aligned with your Budget Justification.


Developing the Budget

Mentor-Connect recommends that you first build your Budget in an Excel spreadsheet. Organize the spreadsheet with budget categories and alphabet letters and numbers to match the budget form (shown on the next page) and set up your Budget Justification narrative the same way. Building your spreadsheet and preparing your Budget Justification will be a back-and-forth process as your project plan evolves and you obtain more precise cost information. As you work, keep an eye on Indirect Costs and on how this expense is impacting the bottom line. Use Excel formulas and keep good notes as you develop your spreadsheet.

When you have a complete, or nearly complete, Year One budget in your spreadsheet, transfer the dollar amounts to the online form. You will see that each section has a hot link that you will activate to work on the various categories.

Note that the only SAVE command is located at the bottom of the budget form. *Save your work after you complete each section so that you do not risk losing it when you leave the form.* Confirm that the totals, which are calculated automatically in the form, match your spreadsheet totals! (Notice that you have a print option on this part of the form. Printing the annual budget forms may make it easier to compare them with your spreadsheet amounts.)

Personnel Direct Costs		Year 1	Total Funds
Section		Year 1	Total Funds
A. Senior Personnel [Manage]			
Pamela J Silvers (PI)			
B. Other Personnel			
Postdoctoral Scholars		0	
Other Professionals		0	
Graduate Students		0	
Undergraduate Students		0	
Administrative/Clerical		0	
Other		0	
Total Salaries and Wages for Senior and Other Personnel (A-B)			
C. Fringe Benefits			
Total Salaries, Wages & Fringe Benefits (A-C)			
D. Equipment			\$0
+ Add Equipment			
E. Travel			\$0
US, territories, and possessions		\$ 0	
Foreign		\$ 0	
F. Participant Support Costs			\$0
Number of Participants		0	
Stipends		\$ 0	
Travel		\$ 0	
Subsistence		\$ 0	
Other		\$ 0	
G. Other Direct Costs			\$0
Materials and Supplies		\$ 0	
Publication Costs/Documentation/Distrib		\$ 0	
Consultant Services		\$ 0	
Computer Services		\$ 0	
Subaward		\$0	
Other		\$ 0	
H. Total Direct Costs (A-G)		Year 1 (A-G)	\$0
Indirect Costs			
Section		Year 1 Rate x Base	Total Funds Requested
I. Indirect Costs			\$0
+ Add Indirect Cost Item			
J. Total Amount Requested (H + I)		Year 1 (H + I)	\$0


Save Preview/Print Cancel

When the budget form is generated for the final project year, the cumulative budget form is also generated. Remember that the cumulative total may not exceed the limit for the type of proposal you are submitting! The total amounts for each year may vary. For example, the Year One budget may be relatively large if you need to purchase equipment that will be used throughout the project.

The budget form depicts all categories that are available for requesting funds. Sections A through G are Direct Costs – personnel and other expenses that are specific to your project. These Direct Cost items will be determined by you. Indirect Costs, however, will be based on a specific subset of Direct Costs using a pre-determined rate. Note that Indirect Costs can have a significant impact on your overall budget!

Your Budget must clearly align with the project's scope of work. The Project Description explains the scope of work, and the Budget requests the funds that will enable the project to be implemented as planned. The two must work in concert, and consistency is important.

Budget Categories

NSF budget categories will differ from budget categories you work with at your college. It is important to understand how NSF defines each category of expense so that, once funded, you can work with your business office to develop a clear crosswalk between the NSF categories and the college accounting codes.

The April 30 webinar focused on NSF categories D through J. Costs related to the Personnel categories (A, B, and C) will be covered in the May 21 webinar, along with other issues related to personnel.

Personnel Direct Costs

- A. Senior/Key Personnel
- B. Other Personnel
- C. Fringe Benefits

Additional Direct Costs

- D. Equipment
- E. Travel
- F. Participant Support
- G. Other Direct Costs
- H. Total Direct Costs

Indirect Costs

- I. Indirect Costs
- J. Total Amount Requested

D. Equipment

NSF allows you to budget for equipment and instrumentation (such as scientific or industrial machinery and laboratory or field instrumentation) that are necessary to support your project. Allowable costs also include shipping and any necessary modifications, attachments, and accessories.

In this section, list any equipment purchased with an acquisition cost of \$10,000 or more. Equipment costing less is classified as Materials and Supplies. For example:

- If a piece of machinery that costs \$9,000 needs two attachments that cost \$500 each, your total acquisition cost is \$10,000 — so it would be budgeted as Equipment.
- If several pieces of laboratory equipment individually cost less than \$10,000, they would be budgeted as Materials and Supplies.

If your college classifies equipment differently than NSF, use the NSF definition for this budget. For example, your college may consider a robotic device to be equipment. However, if robotic devices purchased for use in your project cost less than \$10,000 each, they should be budgeted as Materials and Supplies.

Click on Add Equipment in the budget form to list specific equipment purchases and costs.

The screenshot shows a budget form with a table structure. The top row has headers: 'Section', 'Year 1', and 'Total Funds Requested'. Below this, there are sub-headers: '# Participants' and 'Funds' under 'Year 1'. The table has three columns: 'Section', 'Year 1', and 'Total Funds Requested'. The first row under the headers is for 'D. Equipment', with a value of '\$0' in the 'Year 1' column and '\$0' in the 'Total Funds Requested' column. Below this row is a button labeled '+ Add Equipment'. A red arrow points from this button to a pop-up form. The pop-up form has a header 'D. Equipment' and a total cost of '\$30,000'. It contains a list item '1. 2 Robots' with a trash icon to its right. Below the list item is a button labeled '+ Add Equipment'. To the right of the list item is a text box containing '\$ 30,000'.

Note that:

- All equipment and instrumentation purchases made with grant funds must be:
 - Necessary to improve instructional capabilities
 - Fully explained and justified
 - Not otherwise available and accessible
 - Acquired in accordance with your college's normal practices
 - Have a service life of over one year.
- NSF funds may not be used to support costs that would normally be incurred if you did not have a grant, such as equipment for laboratory upgrades or routine instructional needs (like projectors), maintenance or service contracts for existing equipment, 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 how it will impact student learning outcomes.
- There is no maximum limit on equipment expenditures, but they must be reasonable in relation to your total budget.
- NSF expects that you will ask for any available educational discounts from equipment suppliers and document them in the Budget Justification.

Funds *cannot* be used to support:

- Construction, renovation, or modernization of rooms, laboratories or other facilities, *even if equipment purchased by the grant requires facility upgrades.*
- Installation of equipment or instrumentation (as distinct from the on-site assembly of multi-component instruments, which is an allowable charge).

E. Travel

Your travel budget includes necessary expenses by project personnel, such as conducting field work and attending meetings and conferences associated directly with the work of the project or the dissemination of results. Other college personnel who are not project staff may be included in this category if they are travelling to help accomplish project objectives. For mileage rates and per diem allowances, use the guidelines established by your college. NSF expects your budgeted travel allowances to be consistent with your institutional policies.

Note the following restrictions:

- This budget category is NOT for travel by consultants, advisors, or speakers. Their travel costs should be included in their fees or budgeted under Other Direct Costs.
- Travel and subsistence for project "participants"- such as students or teachers who attend project sponsored workshops or training sessions - should be budgeted in the Participant Support category, not in Travel.
- 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 within the United States and to United States territories is considered domestic travel. All other travel, including to Canada and Mexico, is considered foreign travel.
- Travel expenses must be reasonable in terms of the number of trips and the amounts budgeted.
- Federal travel funds may never be used for alcoholic beverages or entertainment.

Explain all travel expenses, based on careful cost estimates, 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 conferences. If your college does not set per diem rates for meals and lodging, you can find benchmarks in the rates developed for federal agencies by the General Services Administration. (Google GSA per diem.)

Your travel budget must include the costs of attending the annual ATE Principal Investigators Conference in Washington DC every October. If the proposal you submit in 2025 is funded, your first conference will be October 21-23, 2026. The American Association of Community Colleges, which hosts the conference, will provide complementary registrations, individual hotel rooms for three nights, and several meals (currently one dinner and two breakfasts and lunches, but this may vary) for the PI and one other member of the project team. Your budget must cover travel expenses and the cost of meals not provided by the conference. If you need to spend extra nights at the hotel to accommodate travel from distant places or to attend a pre-conference workshop, include the added cost and explain it in the Budget Justification. (The additional conference rate hotel cost in 2026 will be \$290 per night plus tax.) If you need to bring additional team members, you must justify their participation and cover all their expenses.

F. Participant Support Costs

If you plan to offer conferences, workshops, or other short-term instructional or information-sharing activities as part of your project, the costs to support participants at those events will be budgeted as Participant Support. Participants cannot be project personnel. They are individuals usually not from your institution who receive services or training provided by your project. Participants can be required to complete training activities and provide input 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. Note that travel costs for project personnel employed by the grantee college who participate in such events should not be listed in this category, but in category E, Travel.

Eligible for Participant Support (travel, lodging, meals, and - when appropriate - stipends):

- Students who participate in workshops, short courses, or internships.
- Faculty/Teachers who are engaged in professional development activities.
- Technicians/Skilled Workforce Trainees who participate in retraining or certification programs.
- Mentors or Community Participants who receive training that supports grant objectives.

Not Eligible for Participant Support:

- Project Staff (PIs, Co-PIs, Administrators, Coordinators): Salaries and travel expenses are to be included as Personnel and Travel budget items.
- Consultants or Contractors: Expenses are included with their fees for services rendered and budgeted under Other Direct Costs/Consultant Services.
- Collaborators and Co-Instructors: Their contributions are typically related to project implementation, which does not qualify for participant support.
- Students employed by the project: Students who receive wages for project work are not eligible for participant support.

Enter the Participant Support expenses under four categories on the budget form: Stipends, Travel, Subsistence, and Other expenses.

F. Participant Support Costs		\$0	\$0
Number of Participants	<input type="text" value="0"/>		
Stipends		\$ <input type="text" value="0"/>	\$0
Travel		\$ <input type="text" value="0"/>	\$0
Subsistence		\$ <input type="text" value="0"/>	\$0
Other		\$ <input type="text" value="0"/>	\$0

List the number of participants and the total cost in each category. The costs must add value to your project. They must also be reasonable and limited to the days of attendance at the event, plus the actual travel time required to reach the event location. Check your institution's policies on relevant cost items and follow college guidelines regarding reimbursement.

IMPORTANT: You may not transfer funds among line items within Participant Support or move funds 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 Research.gov under Notifications and Requests. An email exchange or a telephone conversation with your Program Officer should be scheduled prior to submitting a request.

Calculate participant support costs for each category and explain them in the Budget Justification:

- Stipends:** Multiply the amount that each participant will receive per day by the number of days and the number of participants. If part of the stipend is intended to cover out-of-pocket costs, be sure to provide an explanation in the Budget Justification.
- Travel:** Estimate anticipated travel costs for your participants. Select economical and direct-route options. (The purpose of the travel and your cost calculations must be explained in the Budget Justification.) Remember that this line item is for participants only.
- Subsistence:** Estimate the cost of meals (without alcoholic beverages) and housing per person per day and multiply 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 cost of dinner.)
- Other:** Enter the total dollar amount of other expenses incurred for the participants. List them and explain how they are relevant (e.g., preparing and printing materials or providing hand-held GPS devices) in the Budget Justification.

G. Other Direct Costs

Other direct costs include expenditures for Materials and Supplies, Publication, Consultant Services, Computer Services, Subawards and Other. Enter the total for each of these categories in Section G and itemize them in the Budget Justification.

G. Other Direct Costs ⓘ		\$0
Materials and Supplies	\$ 0	
Publication Costs/Documentation/Distrib	\$ 0	
Consultant Services	\$ 0	
Computer Services	\$ 0	
Subaward:		\$0
Other	\$ 0	
H. Total Direct Costs (A-G)	Year 1 (A-G)	\$0

Materials and Supplies: Materials and Supplies include necessary project-specific items. Any equipment that costs up to \$10,000 is included in this category, while equipment costing \$10,000 or more is listed under D, Equipment. (If 50 pieces of instrumentation cost \$200 per unit, the \$10,000 cost would still be budgeted under Materials and Supplies since the cost per unit is under \$10,000.) Materials and supplies may include items such as laboratory chemicals and project-specific office supplies. NSF does not permit purchases of office furniture or general office supplies that are not used exclusively for the project.

Publication Costs/Documentation/Distribution: The grant may cover costs of documenting, preparing, presenting, and publishing findings, products, and project-developed materials.

Consultant Services: This is where you will budget for people who work on the project but are not project personnel. Consultants are contractors (such as external evaluators) who are paid a fee for their services. 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 names and affiliations of the consultants in both places if you can identify them before your project is funded.

If the evaluator or evaluation team is named in the proposal, their biosketch(es) must follow the NSF format and be uploaded in Research.gov under Other Personnel Biographical Information. (Note that this differs from the requirements for Senior Personnel biosketches, which follow a different format and are uploaded in SciENCv.) If your college requires evaluation consultants to be selected through a competitive bid process after an award is made, the Project Description should note the policy that prohibits noncompetitive selection, describe the procedures that will be used to select an evaluator after the award is made, and include a detailed job description that specifies the qualifications of the evaluator.

Consultants' rates of compensation must be based on their regular rates of pay. The only other allowable consultant expense is travel. The Budget Justification must include specific information about the consultant's time commitment to the project and associated compensation as well as detailed travel expenses (e.g., mileage, airfare, lodging, meals). If you are unable to identify consultants until your project is funded, the Budget Justification must include your best estimate of compensation and travel expenses.

Computer Services: This category typically refers to costs for computer-based retrieval of scientific or technical data and contracted services for web design and data analysis that is necessary to support or inform the work of your project.

- The cost of computer services may be included in your budget only if institutional policy is to bill computer services as direct costs and, if provided by the institution, at your college's established computer service rates.
- 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. New grantees typically have smaller projects that do not include subawards. If your project does include subawards, add the subaward organizations under Manage Personnel & Subaward Organizations. They will then appear as a line item on the budget form. When you have submitted a complete Budget and Budget Justification for each subawardee, the total from the subaward budgets will auto-populate on the main budget form. Like all awardee organizations, any organization that receives a subaward must be registered in the System for Award Management (SAM). Note that the registration process currently takes two to four weeks.

Other: Any direct costs not previously identified must be included in the Other category and itemized in the Budget Justification. Examples include costs associated with preparing exhibits or presentations, and travel by project advisors who support the project without other compensation.

H. Total Direct Costs

When you have entered all costs in Sections A through G for a year of the project, total direct costs will be calculated automatically on the budget form. When the Year Three budget form is complete, Research.gov will automatically generate the Cumulative budget form, with Total Direct Costs calculated for all three project years.

H. Total Direct Costs (A-G)	\$0	\$0
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I. Indirect Costs

Indirect Costs help support the business operations and other functions of your institution. Your budget must include indirect costs at the federally approved rate that applies to your institution at the time the grant award is made. If your proposal has a subaward, the subawardee's budget must also include Indirect Costs at an established rate for that organization (which is likely to differ from the grantee institution's rate).

IMPORTANT: On May 5, 2025, NSF instituted a policy notice that requires all grants awarded or submitted after that date to use a Standard Indirect Cost Rate of 15% - see more information at <https://www.nsf.gov/policies/document/indirect-cost-rate>. Please check to see if this policy is still in effect as you work on your proposal.

Ask your business office whether your college has established an Indirect Cost rate and, if so, what the current rate is. Indirect Cost rates can change over time, so be certain that the one used in your proposal is current, and that it will not expire before the ATE due date. Request documentation of the rate so that you have it for easy reference. 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. Before an award can be made to your institution, you will be required to provide written verification of the rate.

Some colleges have a higher on-campus Indirect Cost rate and a much lower off-campus rate. If this is the case at your college, ask whether your project activities qualify for the off-campus rate. (NSF allows colleges to determine which rate to apply.)

Note that the full Indirect Cost rate must be applied in your budget. An institution that offers to accept less than the current rate to provide more funds for project work will be engaging in cost-sharing, which is prohibited by NSF.

Funds in the Indirect Cost line item cannot be reallocated to other line items. However, 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, they could pay for salaries or equipment that are not included in your budget. **IMPORTANT:** Your Project Description and Budget Justification should NOT address how Indirect Costs will be utilized. That is strictly an internal matter at your institution.

What if your college does not have an Indirect Cost rate? If you do not have a negotiated rate for the current proposal NSF requires that you develop your budget using the *de minimis* rate, which was recently increased from 10 to 15 percent of the allowable operating costs (also called the Total Modified Direct Costs). Your business office may use the *de minimis* rate indefinitely for future projects or it may apply for a negotiated rate. If it chooses to apply for a negotiated rate, it may not do so 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 costs to be included in the base for calculating your Indirect Costs will be determined at that time. (See the Mentor-Connect Resource Library for more information about applying for a rate.) A newly negotiated Indirect Cost rate will not apply to your current grant proposal, but only to future proposals.

(The NSF Proposal and Award Policies and Procedures Guide (PAPPG), which explains the rules and regulations for proposal development, still shows the *de minimis* rate as 10 percent, but the new rate is included in the Office of Management and Budget guidelines, which are updated regularly. See the top of the ATE program solicitation web page for links to these OMB guidelines.)

Calculating Indirect Costs: The rate is the federally determined percentage to be applied, and the base is the total of the specific costs in the budget to which the rate applies.

Indirect Costs are typically based on personnel costs, which may include salaries and wages or a combination of salaries, wages, and fringe benefits.

Section	Year 1 Rate x Base	Total Funds Requested
1. Indirect Costs		\$0
1. <input type="text"/>	0.00 % x \$ <input type="text" value="0"/>	\$0
+ Add Indirect Cost Item		\$0 funds

In some cases, the Indirect Cost rate may apply to overall costs of college operations. Ask your business office how your rate is calculated. If it is based on overall operational costs, the rate is determined by calculating what is called the Total Modified Direct Costs (TMDC). This requires subtracting ineligible costs from Total Direct Costs. Ineligible costs are participant support, equipment, and any subawards that exceed \$50,000. (This subaward limit was recently increased from \$25,000. The new amount has not yet been updated in the PAPPG, but it is noted in the OMB guidelines mentioned above.)

You must enter the base amount and the rate to be applied for each year on the budget form. Do not use a percent sign or a decimal point when you enter the rate. (If the rate is 30%, enter 30.) The budget form will then automatically calculate the Indirect Costs.

IMPORTANT: Pay close attention to the impact that Indirect Costs have on your project budget. A high Indirect Cost rate will limit the amount of money available for the work of the project, because these costs are included within the total grant request amount, not in addition to that amount.

J. Total Direct and Indirect Costs

We are getting to the bottom line! When you click on *Calculate* in Section J, the system will automatically determine your total Direct and Indirect Costs.

J. Total Amount Requested (H + I)	\$0	\$0
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Completed Budget Forms

When you have entered all Year One budget information, Research.gov will produce a concise budget form that looks like the one on the next page. After you go through the same process for Years Two and Three, the system will generate forms for those years. The cumulative budget form with three-year totals for each category will generate automatically when you submit the last of the annual budgets.

Note that Research.gov automatically helps you avoid errors when you fill out the budget form by running compliance checks each time you use the SAVE command. Messages like this one will guide you to errors that require your attention.

- The form contains the following error(s) which must be fixed before submitting the proposal.**
- The indirect cost description must be specified

The Command Page, where you initiate all components of the proposal, also has a compliance check function that will help ensure that you have addressed all components of the proposal.

Prime Organization			
Budget for:	Principal Investigator	Total Requested Amount ⓘ	Compliance Status [Key]
Florence-Darlington Technical College	Pamela J Silvers	\$83,025	ⓘ Error(s) will prevent submission

SUMMARY PROPOSAL BUDGET				YEAR 1	
ORGANIZATION Florence-Darlington Technical College				FOR NSF USE ONLY	
				PROPOSAL NO.	DURATION (months)
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR Pamela Silvers				Proposed	Granted
				AWARD NO.	
A. SENIOR/KEY PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior/Key Associates (List each separately with title, A.7. show number in brackets)				NSF Funded Person-months	Funds Requested By proposer
	CAL	ACAD	SUMR	Funds granted by NSF (if different)	
1. Pamela Silvers - Principal Inv	2.0			10,000	
2.					
3.					
4.					
5.					
6. () OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)	0.0			0	
7. (1) TOTAL SENIOR/KEY PERSONNEL (1 - 6)	2.0			10,000	
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)					
1. (0) POST DOCTORAL SCHOLARS	0.0			0	
2. (0) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)	0.0			0	
3. (0) GRADUATE STUDENTS				0	
4. (0) UNDERGRADUATE STUDENTS				0	
5. (0) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)				0	
6. (0) OTHER				0	
TOTAL SALARIES AND WAGES (A + B)				10,000	
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)				2,500	
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)				12,500	
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)					
TOTAL EQUIPMENT				0	
E. TRAVEL				1,800	
1. DOMESTIC (INCL. U.S. POSSESSIONS)				0	
2. INTERNATIONAL				0	
F. PARTICIPANT SUPPORT COSTS					
1. STIPENDS \$ _____				0	
2. TRAVEL _____				5,000	
3. SUBSISTENCE _____				75	
4. OTHER _____				0	
TOTAL NUMBER OF PARTICIPANTS (25)				5,075	
G. OTHER DIRECT COSTS					
1. MATERIALS AND SUPPLIES				350	
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION				0	
3. CONSULTANT SERVICES				8,000	
4. COMPUTER SERVICES				0	
5. SUBAWARDS				0	
6. OTHER				50,000	
TOTAL OTHER DIRECT COSTS				58,350	
H. TOTAL DIRECT COSTS (A THROUGH G)				77,725	
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE) (Rate: 15.0, Base:12500)					
TOTAL INDIRECT COSTS (F&A)				1,875	
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)				79,600	
K. FEE				0	
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)				79,600	
M. COST SHARING PROPOSED LEVEL \$ 0				AGREED LEVEL IF DIFFERENT \$	
PI/PD NAME Pamela Silvers				FOR NSF USE ONLY	
				INDIRECT COST RATE VERIFICATION	
ORG. REP. NAME*				Date Checked	Initials - ORG
				Date Of Rate Sheet	

BUDGET JUSTIFICATION

Since the Budget form does not allow you to provide details about WHY you are requesting funds or HOW you determined the dollar amounts, you must prepare a Budget Justification that addresses these questions. It is a separate document that explains your expenses for each year of the project. You are allowed up to five pages (which are not counted toward other page limits in the proposal). Small projects are not likely to need all five pages, but you must be thorough in your explanation of costs. Remember that subawards must have their own Budgets and Budget Justifications.

NSF does not require a specific format, but Mentor-Connect strongly suggests that you organize your Budget Justification using the same alphabet letters and subsection descriptors that appear in the budget form. This makes it easier for Programs Officers and reviewers to compare the information in these documents. It is good practice to include all letters and subsections, even if you do not have a budget request in some of those categories. If you have not requested funds for a specific category state “none requested” to make it clear that you have not inadvertently overlooked something.

Align activities and corresponding budget amounts so that the Project Description and the Budget Justification are mutually supportive. Do not request funds for any items or activities that have not been explained in the Project Description.

Request funds for specific purposes and provide logical reasons for those expenditures.

- Explain what you plan to purchase and why those purchases are necessary.
- Research the costs. Be economical and be specific about the costs per item.
- Describe how your expenditures will benefit students or participants.

When an expense consists of several items (e.g., air fare, baggage charges, lodging, and meals in the Travel section), calculate the individual cost of each item and make realistic estimates of increases in those costs over the life of the project.

On the Control Page, select Budget Justification to upload your document as a pdf file. Make sure that the formatting appears correct on the screen, then print the document and re-check the formatting.

Sample Budget Justification

See the following pages for an example of a Budget Justification that describes project expenses under the letters and headings that are used in the budget form.

Budget Justification (Cyber)

A. Senior Personnel:

Year 1: \$18,770	Year 2: \$18,770	Year 3: \$18,770	Total: \$56,310
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- PI Dr. [REDACTED] is a 9.5-month faculty and will provide additional time to the project, of 6 hours/week for 50 weeks (300 hours/year). Rates are per college policy at \$36/hour for a doctorate. The total is \$10,800/year. The three-year total is \$32,400.
- Co-PI [REDACTED] is a 9.5-month faculty and will provide additional time to the project, of 5 hours/week for 50 weeks (250 hours/year). Rates are per college policy at \$31.88/hour for a bachelor's degree. The total is \$7,970/year. The three-year total is \$23,910.

B. Other Personnel

Year 1: \$30,931	Year 2: \$80,330	Year 3: \$80,330	Total: \$191,591
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- Interns: Four interns will be hired on-site to restart the internship program and develop guidelines for employers. Years 2-3: Four interns will work 10 hours/week for 32 weeks at \$25/hour (\$32,000). The two-year total is \$64,000.
- Career Coach (CC). This position will be paid a maximum Master's hourly rate of \$35.80. Year 1 they will work 27 hours/week for 32 weeks for a total of \$30,931. Years 2-3 of the project he/she will work 27 hours/week for 50 weeks at a yearly cost of \$48,330 (\$35.80 x 27 hours/week x 50 weeks x 2 years) for a total of \$96,660. The three-year total is \$127,591.

C. Fringe Benefits

Year 1: \$8,400	Year 2: \$12,179	Year 3: \$12,179	Total: \$32,758
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- PI [REDACTED]: Per college policy, only two fringe benefits are applied to full-time faculty additional or overload pay totaling 32.15% (Retirement at 24.5 % and FICA at 7.65%). The total is \$3,472/year. The three-year total is \$10,416.
- Co-PI [REDACTED]: Per college policy, only two fringe benefits are applied to full-time faculty additional or overload pay totaling 32.15% (Retirement at 24.5 % and FICA at 7.65%). The total is \$2,562/year. The three-year total is \$7,686.
- The Career Coach: Benefits are FICA at 7.65%. Year 1 cost = \$2,366, Years 2-3 = \$3,697 each year (\$7,394). The three-year total is \$9,760.
- Interns: Benefits are FICA at 7.65% Years 2-3=\$2,448 each year. The two-year total is \$4,896.

D. Equipment

Year 1: \$50,000	Year 2: \$0	Year 3: \$0	Total: \$50,000
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Year 1: Purchase two servers at \$25,000 each for a total of \$50,000. CCC will be utilizing [REDACTED] package labs from [REDACTED] (provided free through [REDACTED] Network membership) that are delivered remotely, instructors will be positioning local labs as well as additional virtual machines to support the program. The servers must be robust to allow a 5-year lifecycle before upgrading or replacing. (Sustainability: CCC will replace the servers in 5 years as part of the computer rotation plan.)

E. Travel

Year 1: \$9,388	Year 2: \$7,362	Year 3: \$8,840	Total: \$23,034
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All travel costs are associated with conference travel for professional development/project dissemination.

1. Attending the ATE Principal Investigators Conference as required. The PI & Co-PI will travel together by car to the conference, reducing travel expenses. The total cost for both is \$1,484/year. The three-year total is \$4,452.

ATE PI Conference in Washington, DC	PI	Co-PI
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Lodging \$300/night	\$ 300	\$ 300
Per Diem 44.10/day (out-of-state rate)	132	132
Registration-1 precon for all @ \$50, free for 2, 300 each for 2.	50	50
RT Mileage to DC (544) \$0.62/mile (Team will travel in 1 vehicle)	340	0
Valet POarking @ 60/night/3 nights	180	0
TOTAL	\$1,002	\$ 482

2. HI-TEC conference (at various locations annually). Per person cost = \$2,674/ year and is based on actual expenses from the 2023 HI-TEC conference. The PI and Co-PI will attend Years 1-3 for an annual cost of \$5,348. The three-year total is \$16,044. The purpose of attending HI-TEC is to showcase the Cyber project and allow faculty to learn from other college STEM programs on national trends.

Hi-TEC Conference – Various Locations	Per Person Cost
Airfare	\$ 600
Lodging \$230/night x 4 nights	920
Per Diem 44.10/day (out-of-state rate) x 5 days	211
Registration (includes 1 pre-con)	700
Baggage (RT)	70
Mileage to Airport RT (95 miles @ \$.625/mile)	59
Airport Parking \$11/day x 4 days	44
Hotel Shuttle	70
TOTAL	\$2,674

3. The [REDACTED] Community College System conference in [REDACTED] is only held biannually. The PI & CoPI will attend in Year 3. The cost = \$739/per person x 2 people totals \$1,478. The purpose of attending is to disseminate project updates/results to the local and regional community colleges.

NCCCS Conference in [REDACTED]	Per Person Cost
Lodging @ 150/night * 2 nights	\$300
Per Diem @ 41.30/day in-state rate x 3 days	124
Registration	225
Mileage 110 miles RT @ \$.625 /mile last	69
Parking @ \$ 7/day	21
TOTAL	\$739

4. Year 1 trip for PI & CO-PI to Miami Dade Community College for a site visit and mentoring on cyber range simulation. Cost - \$1,278/person x 2 people in for a total of \$2,556.

Miami Dade Visit	Per Person Cost
Airfare	350
Lodging \$230/night x 2 nights	460
Per Diem 44.10/day x 3 days	126
Baggage (RT)	70
Mileage to Airport RT (95 miles @ \$.0625/mile)	59
Airport Parking \$11/day x 3 days	33
Rental Car 3 days @ \$60/day	180
TOTAL	\$1,278

5. [REDACTED] InfoSeCon (sponsored by ISSA regional) – held in [REDACTED]. The PI, Co-PI, and Career Coach will escort 10 students to the conference using the College's van (student costs are listed in participant support) in Years 2-3. The total is \$530/year. The two-year total is \$1,060.

ISSA Conference	PI Cost	Co-PI Cost	CC Cost
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Registration	150	150	150
Roundtrip Mileage to [REDACTED] 110 miles @ \$.625/mile)	69	0	0
Parking is \$11/day (one day)	11	0	0
TOTAL	\$230	\$150	\$150

F. Participant Support Costs

Year 1: \$ 1,350	Year 2: \$ 10,100	Year 3: \$ 10,100	Total \$21,550
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1. Student ISSA membership costs for Years 1-3 at \$45/student for 30 students = \$1,350/year. The three-year total is \$4,050.
2. ISSA conference in Years 2-3 for 10 students at \$50 each (covers food for 3 meals, registration is free) for a total of \$500/year. The two-year total is \$1,000.
3. In Years 2-3, CCC will provide one-day cybersecurity awareness training to high school counselors including guests from the Home School Association and large area private schools. The training will provide a stipend of \$125 each (\$3750) and pay \$25 for lunch/snacks each (\$750) for 30 individuals totaling \$4,500/year. The two-year total is 9,000.
4. In Years 2-3, CCC will provide one-day cybersecurity awareness training to 50 high school students including students from the Home School Association and large area private schools. The training will provide gift cards of \$50 each (\$2,500) and pay \$25 each (\$1,250) for lunch/snacks for a total participant cost of \$3,750/year. The two-year total is \$7,500.

G. Other Direct Costs

Year 1: \$108,490	Year 2: \$18,182	Year 3: \$21,682	Total: \$147,354
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➤ Materials and Supplies

Year 1: \$81,650	Year 2: \$0	Year 3: \$0	Total: \$81,650
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All supplies will be purchased in Year 1.

- Start-up computers (24 at \$2,700 each) with dual high-end video cards. The new required cybersecurity computer lab will be created from an empty classroom (C2038), specifically for establishing the Cyber Range. Workstations will need additional, graphics cards to support cryptography and cryptography cracking. The lab will support 24 computers (including the instructor's workstation and image computer). Sustainability: CCC will replace the workstations in 5 years as part of the computer rotation plan. The total is 64,800.
- Classroom televisions (4 - 85" at \$2,500 each) to provide visual access to the local mock Security Operations Center (SOC). This option is more cost-effective and has a longer lifespan than using overhead projectors, allowing multiple images (picture-in-a-picture), and presentations of multiple systems while monitoring the infrastructure (SOC). Sustainability: Future department funds will replace the televisions as needed. Instructors and interns will maintain and wire to infrastructure as necessary. The total is \$10,000.
- One Network Switch, with a three-year warranty at \$4,000, will connect C2038 to the department's infrastructure by fiber and support the connections to the computing equipment in the lab. Sustainability: The switch will fall under the Cisco® Networking Academy™ Maintenance Agreement provides updates (no cost) for software during the lifecycle of the device. Future department funds will replace the switch as needed The total is \$4,000.
- Ten Raspberry Pi® systems at \$216 each will be used as server infrastructure in the virtual environment for the IT-Cyber section's data center. These will be programmed with additional scenarios in locally designed labs for student usage while monitoring the SOC. Sustainability: CCC will replace the servers in 5 years as part of the computer rotation plan. The total is \$2,160.

- Three network taps (\$230 each) to allow monitoring of the IT-Cyber infrastructure network. They are required to allow monitoring of ingress and egress of the local firewall and allow this traffic to be accessed by the (intern-run) SOC. Sustainability: Once installed, their lifecycle is 7-9 years. Future department funds will replace the taps as needed. The total is \$690.

➤ Publication, Documentation, and Dissemination

Year 1: \$ 625	Year 2: 0	Year 3: \$400	Total: \$1,025
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Year 1 will purchase 1,000 Double-sided 5.5 X 8.5 Cards for \$250 and 1,000 Trifold Color Brochures for \$375 to disseminate project information for a total Year 1 cost of \$625. Year 3 will update and purchase 500 Double-sided 5.5 X 8.5 cards for \$150 and 500 Trifold Color Brochures for \$250 to disseminate project information for a total Year 3 cost of \$400.

➤ Consultant Services

Year 1: \$12,000	Year 2: \$16,082	Year 3: \$18,182	Total: \$46,264
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1. Evaluation [REDACTED] will provide an external evaluation based on the detailed plan in the Project Description. They will provide formative and summative evaluation services across the full spectrum of grant-related efforts—Process, Implementation, Outcomes/Impact, and Sustainability. In addition, [REDACTED] will partner with the grant team to facilitate a grant [REDACTED] to help ensure a collaborative review of evaluation data/efforts. The [REDACTED] is designed to help grant faculty and staff ensure evaluation efforts produce actionable and impact evaluation findings. Year 1 will include 100 hours of evaluation work at \$120/hour totaling (including campus site visit) for a total of \$12,000. Year 2 will include 91.5 hours at \$120/hour of evaluation work for a total of \$10,980. Year 3 will include 109 hours at \$120/hour (including a campus site visit) for a total of \$13,080. CA will provide an annual formative evaluation report at the end of year 1 and year 2. Furthermore, CA will provide a final summative evaluation report after the grant, as well as meet with the grant and/or college leadership to discuss and review evaluation results and lessons learned. Note: CA is providing evaluation services for CCC's current grant (DUE# [REDACTED]) and is best suited to evaluate this project as they know the college and are part of the grant team.

Year 1:	Year 2:	Year 3:	Total:
\$12,000	\$10,980	\$13,080	\$36,060

2. Interpreters for Deaf and Hard of Hearing: In Years 2-3, two interpreters be needed to support 2 eight-hour workshops each year (2 interpreters at \$100/hour each x 1 workshop x 8 hours = \$3,200). The total cost will be \$6,400.

Year 1: \$0	Year 2:	Year 3:	Total:
	\$3,200	\$3,200	\$6,400

3. Workshop Moderator/Facilitator: CCC will engage [REDACTED] to assist with the two annual workshops each in Years 2-3. She is offering her travel expenses only (no fee) @ \$751/workshop for a total of \$1,502 per year. The total for Years 2-3 = \$3004

Facilitator/Moderator Expenses	Per Workshop Cost
Lodging /night x 2 nights	260
Per Diem 44.10/day x 3 days	132
Mileage 558 miles @ \$.0625/mile	349
TOTAL	\$751

Year 1: \$0	Year 2: \$1,502	Year 3: \$1,502	Total: \$3,004
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- Computer (ADPE) Services
There are no Computer Services for this project.

- Subcontracts
There are no subcontracts for this project.

- Other:

Year 1: \$14,215	Year 2: \$2,500	Year 3: \$2,500	Total: \$19,215
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1. Credly License: Credly is a digital badging system that will automate the issuing of verified digital badges, which can be customized to meet the credentialing needed for cybersecurity skills attained by students based on those identified by the workforce. The cost is \$2,500/year for Years 1-3. The total three-year cost is \$7,500

Year 1: \$2,500	Year 2: \$2,500	Year 3: \$2,500	Total: \$7,500
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2. [REDACTED]: The proposed cyber range classroom ([REDACTED]) is currently set up for only lecture-type instruction. The [REDACTED] Community College System's office (NCCCS) requires all network cabling to be contracted with an entity authorized by the [REDACTED] as well as, be certified by TIA/EIA for copper cabling (Category 6 and above) and fiber optic cabling (single mode encased in either conduit or Romex). Sustainability: Once installation is complete, any needed maintenance will be part of the instructor's duties for the lab. The total contract cost is \$11,715 in Year 1.

Year 1: \$11,715	Year 2: \$0	Year 3: \$0	Total: \$11,715
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H. Total Direct Costs

Year 1: \$227,329	Year 2: \$146,923	Year 3: \$150,901	Total: \$525,153
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Total direct costs reflect the total annual cost of Sections A-G above.

I. Indirect Costs

CCC's federally approved Indirect Cost Rate is 43% of direct salaries, wages, and fringe benefits. The total indirect costs are calculated at 43% of the yearly total of section A. Senior Personnel and C. Fringe Benefits. Currently, CCC's rate is provisional until the new rate (in the process) is established. The annual base is indicated in the following chart:

Year 1: \$24,983	Year 2: \$47,850	Year 3: \$47,850	Total: \$120,683
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J. Total Direct and Indirect Costs

Year 1: \$252,312	Year 2: \$194,773	Year 3: \$198,751	Total: \$645,836
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