

CHAPTER 3

BUDGET AND BUDGET NARRATIVE GUIDELINES

A. INTRODUCTION

In addition to the project narrative, each TIP proposal must include a budget and budget narrative using the NIST-1022 “Family of Forms.” Budgets are cost projections that must cover all project tasks and all project recipients for each year of the proposed project. Budget narratives provide detailed explanations of budgeted costs. The budget and budget narrative must include both the federal funds being requested as well as all funds and in-kind contributions that constitute the official, auditable cost share to the project.

During the evaluation process, TIP will evaluate the project budget and budget narrative of each proposal to determine if the dollar amounts requested are consistent with the accomplishment of the proposed tasks. All budgeted project costs will be evaluated and must be deemed allowable, reasonable, and allocable in accordance with applicable federal cost principles and TIP guidelines. A poorly prepared or incomplete budget or budget narrative may result in a proposal being ranked low or even noncompetitive.

TIP recognizes that unexpected events may occur during the life of a project and project budgets may need to be changed as a result. TIP will allow a certain amount of flexibility in moving funds from one line item to another or in deleting or adding new tasks provided the request is made in accordance with the terms and conditions of the award and the required prior approval and/or notification is obtained from the NIST Grants Officer. Therefore, decisions made when proposing a multi-year budget won’t necessarily lock the proposer into fixed budget category allocations.

Once a proposal is submitted the total amount of TIP funds requested in the budget cannot be increased. TIP will not reimburse companies for project overruns. Total project cost share commitments included in final awards must be honored. Significantly overestimating or underestimating project costs and cost share commitments should therefore be avoided.

A properly prepared budget is integral to how proposers describe and select project tasks, key players, project costs, and the source(s) of funding. This chapter provides guidelines to help applicants plan and prepare the project budget and budget narrative. Instructions for filling out the NIST budget forms are provided in the Exhibits included at the end of Chapter 7.

Planning a project budget and budget narrative for a multi-year project is a complex and time-consuming process. TIP recommends that all applicants draft budget details before attempting to enter final data into the NIST budget forms.

B. PROJECT TASKS

The first step in planning a project budget is to identify the tasks that must be performed in order to achieve the successful completion of the project. This step involves the creation of a project narrative that describes the scope of the project along with a detailed research plan that explains how the research tasks will be performed to reach the technical objectives. Guidelines for preparing the project narrative are found in Chapter 2.

For the most part, all project tasks are expected to be performed in the United States. For any task that can only be performed outside of the United States, a NIST-1022H form, “R&D Work Performed Outside the United States by the Recipient or Contractor Questionnaire,” must be filled out and include a compelling justification as to why the task(s) cannot be performed equivalently in the United States.

Proposals involving significant research outside the United States will likely be considered less competitive when evaluated against the TIP evaluation criteria related to advancing the state of the U.S. science and technology base and generating substantial benefits to the Nation.

Accordingly, all major project tasks included in the project Gantt chart should also appear on the NIST-1022E form (single company proposals) or the NIST-1022F form (joint venture proposals). Note that TIP does not prescribe the appropriate number of tasks but does require an accurate accounting of tasks in the project budget. Subtasks are not required on the budget forms, but describing them in the project narrative is strongly advised to improve the competitiveness of the proposal.

The numbering system used for major task levels in the Gantt chart should be the same as used in the project narrative and on the NIST-1022E form (single company proposals) or the NIST-1022F form (joint venture proposals), so that reviewers can easily assess how major tasks fit together in terms of timing, milestones, metrics, resources, costs, and other related issues.

C. KEY PLAYERS

The next step in the budget planning process is to identify who will be involved in the project and what role they will undertake. TIP projects classify key players as recipients, subrecipients, contractors, third party contributors, and informal collaborators. These players differ in terms of the work they can perform, the compensation they can receive, and the cost share they can provide.

- 1. Recipients.** A recipient is an organization that has received a TIP single company award or an organization that is a member of a joint venture that has received a TIP joint venture award.

The single company recipient is the organization that submits the proposal, leads the project, and is responsible for all budgeted items and cost share requirements. The recipient must define the project goals and be substantially involved in the project. Note that this does not preclude them from arranging to have some tasks performed by other entities, such as subrecipients or contractors. It does mean that a project in which a significant portion of critical, high-risk tasks are assigned to subrecipients or contractors while a recipient plays a lesser role in the project will not be considered as competitive in the proposal evaluation process. For example, a TIP proposal involving a virtual company that uses contractors to perform most of the critical, high-risk tasks will be considered less competitive or even noncompetitive in the evaluation process.

For a joint venture award, recipients are those eligible project members that are signatories to the project's joint venture agreement and are responsible for all budgeted items and cost share requirements. At least two eligible companies, or one eligible company and one institution of higher education or other organization in the joint venture must be substantially involved in the project (See Chapter 1, Section B.2). Substantial involvement means that at a minimum, these core recipients must be actively involved in defining and planning the research agenda and/or substantially involved in the project R&D. Joint ventures may be considered to be more competitive if it is clear that all joint venture members have been involved in planning the research tasks and goals.

As with a single company project, the requirement for Joint Venture recipients to be substantially involved do not preclude a recipient(s) from arranging to have some tasks performed by other entities, such as subrecipients or contractors. Once again, a project that assigns a significant portion of critical, high-risk tasks to nonrecipients, while recipient(s) play less than a substantial role in the project, will not be considered as competitive in the proposal evaluation process.

2. **Subrecipients.** Under the TIP statute, recipients to a TIP award are allowed to issue subawards to subrecipients. A subrecipient can receive funds to perform project related tasks and can provide funds that can be used to support a recipient's cost share requirement. Any eligible company, institute of higher education, national laboratory, governmental laboratory (excluding NIST), or nonprofit research institute can be a subrecipient. Large companies are not eligible to receive funding under the TIP statute, and therefore cannot receive funding as subrecipients.

Subrecipients must comply with all rules, regulations, terms, and conditions that apply to recipients of a TIP award. Tasks assigned to a subrecipient must be acceptable project tasks that are eligible to receive funding under a TIP single company or joint venture award. Tasks assigned to a subrecipient may include critical, high-risk technical tasks, provided that a strong technical justification is made.

Projects in which a significant portion of high-risk tasks are assigned to a subrecipient(s) and as a result leave the recipient with a less than substantial role in the project will not be considered as competitive in the TIP proposal evaluation process.

Recipients with subawards are responsible for oversight of the work performed by each subrecipient and for the provision of cost share funds pledged by subrecipients. Recipients should establish a plan to monitor the subrecipient's performance of research tasks, regulatory compliance issues, spending, budget(s) and budget narrative(s).

The following federal-wide Subaward Agreement format is suggested to those recipients with subawards and all parts are located at <http://www.nist.gov/tip/helpful-resources.cfm>. These components are from the model agreement developed and used by many federal agencies for research grants and cooperative agreements. More information regarding the model agreement can be found at http://sites.nationalacademies.org/PGA/fdp/PGA_056020. Note that the model agreement is not a required form, only an optional format for capturing Subaward requirements.

- a. Research Subaward Agreement
 - 1) Attachment 1 Certifications and Assurances
 - 2) Attachment 3A Prime Recipient Contacts
 - 3) Attachment 3B Subrecipient Contacts
 - 4) Attachment 2 Prime Award Terms and Conditions NIST
 - 5) Attachment 4 Reporting Requirements

The above format includes the flow-down of the following required terms and conditions for subawards by recipients and all requirements are located at <http://www.nist.gov/tip/helpful-resources.cfm>:

- Research Terms and Conditions: <http://www.nsf.gov/pubs/policydocs/rtc/termsidebyide.pdf>
- Research Terms and Conditions Appendix C: <http://www.nsf.gov/bfa/dias/policy/rtc/appc.pdf>
- Department of Commerce implementation of the Research Terms and Conditions: http://www.nsf.gov/pubs/policydocs/rtc/doc_1008.pdf
- Department of Commerce Financial Assistance Standard Terms and Conditions March 2008: <http://oam.ocs.doc.gov/docs/GRANTS/DOC%20STCSMAR08Rev.pdf>
- General Terms and Conditions Technology Innovation Program December 2009: <http://www.nist.gov/tip/helpful-resources.cfm>
- Special Award Conditions Technology Innovation Program December 2009: <http://www.nist.gov/tip/helpful-resources.cfm>

The NIST-1022B form is used to identify each Subrecipient. Related budget information is entered on the corresponding recipient's NIST-1022C Budget Narrative form under Section F "Other" and Section G "Indirect Costs." Note that recipients with

foreign subrecipients must also fill out the NIST-1022G form and explain why work must be done abroad.

When selecting a subrecipient it is very important that all conflicts of interest are revealed and addressed. A conflict of interest can occur, for example, when a recipient awards a subaward to another part of the same organization or to another organization with identical or nearly identical ownership. Each relationship with a conflict of interest will be reviewed to determine if it is appropriate and allowable. In all cases no profit or fee is allowable for a Subrecipient. For additional guidance regarding conflicts of interest see Codes of Conduct 15 CFR §14.44.

- 3. Contractors.** Contractors are those entities that provide supporting work, services, or materials to a project recipient for a fee. Contractors can be companies, institutes of higher education, laboratories, governmental laboratories (excluding NIST) or nonprofit research institutes. Large companies can be contracted to perform tasks for a TIP project provided that the requirements of 15 CFR Part 14 are met.

Projects in which a significant portion of high-risk tasks are assigned to a contractor(s) and as a result leave the recipient with a less than substantial role in the project will not be considered as competitive in the TIP proposal evaluation process.

Identifying information for each contractor is provided on the NIST-1022B form. Budget narrative information for each contractor is included in Section E “Contractors” of the corresponding recipient’s NIST-1022C form “Budget Narrative.” Sole source foreign contractors will receive additional scrutiny and the recipient must fill out the NIST-1022G form that explains why the work can only be done by the foreign contractor.

All contract arrangements must comply with rules governing intellectual property rights generated under an award. University faculty who contract to provide consulting services should check to be sure that there is no conflict between the requirements of the award funded and their university employment contract, and that their project contract is consistent with their university employment agreement.

Contractors should be selected on a competitive basis pursuant to the Procurement Standards in 15 C.F.R. Part 14. When selecting a contractor, it is very important that all conflicts of interest are revealed and addressed. For example, a conflict of interest can occur when any organization, including any JV member, contracts to another part of the same organization or to another organization with identical or nearly identical ownership. Each relationship with a conflict of interest will be reviewed to determine if it is appropriate and allowable. For additional guidance regarding conflicts of interest see Codes of Conduct 15 C.F.R. §14.44.

Contractors who have more than a 10% equity interest in a recipient must provide justification and assurances that the contractor does not profit from the contract. Should an award be made and the proposal involves any contractor with an equity interest in a project recipient, a Special Award Condition will be issued that restricts payments to

the contractor for costs only. In any case, no profit or fee is allowable for a contractor holding an equity interest in a project recipient.

If work is proposed by a contractor who is part of the same organization as the recipient or who is part of another organization with identical ownership, the work should be shown as being funded through an interorganizational transfer that does not contain profit. Interorganizational transfers should be broken down by budget categories in a similar manner as other non-contractor costs. Furthermore, any interorganizational transfers that are not within the United States must be clearly identified next to the budgeted item as a “Foreign Interorganizational Transfer.”

- 4. Third Party In-Kind Contributors.** A third party in-kind contributor provides essential, non-cash items to a TIP project recipient that may be considered as part of the recipient’s official auditable cost share commitment. Third party in-kind contributions can be made by any nonfederal source (except contractors working on a TIP project), and include but are not limited to equipment, research tools, software, supplies, and/or services.

In-kind contributions are provided as part of an agreement between the recipient and the contributor. If such contributions are included in the cost share commitment of a recipient then a letter of commitment from an authorized senior executive of the third party organization making the contribution is required. This letter should clearly state the form of the contribution, the estimated value, and the time period over which the contribution is being made. The value of the commitment in the letter must be consistent with the amounts entered as a direct cost in the recipient’s budget forms.

In-kind contributions are entered as a direct cost on the recipient’s NIST-1022D form and as a source of funds on the NIST-1022E form (for single company proposals) or the NIST-1022F form (for joint venture proposals). Third party in-kind contributions that will not be included in a recipient’s cost share commitment should not be entered into the recipient’s budget or source of funds. This type of participation in the project is better described under informal collaboration.

- 5. Informal Collaborators.** An informal collaborator performs work in conjunction with a TIP recipient. While not directly part of a proposed TIP project and not included in the official budget or cost share commitment, the work performed by the informal collaborator facilitates the recipient’s role in the TIP project and may contribute to intellectual property created under an award, if funded.

For example, members of a large company might agree to provide consulting services to a fledgling recipient on a proposed TIP project. Because this collaboration enhances the credibility of the recipient, the recipient mentions the collaborators’ role in the project narrative. This relationship is an informal collaboration because it does not involve specific project tasks, does not allow the large company to retain title to any intellectual property arising from the project, and does not incur any project costs.

Because all activities of an informal collaborator are off-budget, informal collaborators do not appear on a TIP budget. An award recipient is responsible for making sure that their informal collaborations do not cause a violation of the intellectual property requirements under an award. Typically, this requires that the informal collaborator be informed by the recipient of the intellectual property requirements of a TIP funded project.

D. PROJECT COSTS

Once project tasks and the role of key players are identified, the next step in preparing a project budget is to forecast the cost of each task. From an expense viewpoint, there are two classifications of project costs, direct costs and indirect costs, where

$$\text{Total Project Cost} = \text{Total Direct Project Costs} + \text{Total Indirect Project Costs}$$

All costs must be deemed allowable, reasonable, and allocable in accordance with applicable federal cost principles and TIP guidelines.

In general, direct costs include personnel, travel, equipment, materials and supplies, contracts, and other costs directly related to the development of the proposed technology or technologies. Indirect costs are those project costs incurred for common or joint objectives and generally include utilities, rent, and other administrative expenditures.

Note that because of the diverse characteristics and accounting practices of different organizations, it is not possible to specify the types of costs that may be classified as direct costs in all situations. Furthermore, a cost may not be allocated to an award as a direct cost if any other cost incurred for the same purpose in like circumstances has been assigned to an award as an indirect cost. Ultimately, NIST shall determine the allowability of all direct costs in accordance with applicable federal cost principles. Therefore, applicants are advised to review all cost principles and guidelines before preparing TIP budgets.

The NIST-1022C form is used to capture the yearly budget data for each project recipient. When this form has been filled out, the cost data will be automatically entered into the NIST-1022E form (for single company proposals) or the NIST-1022F form (for joint venture proposals) to provide a yearly summary of the project budget.

1. Direct Project Costs

- a. **Personnel Costs.** Personnel costs are those direct project costs associated with compensating project staff members who are engaged in the project's technical research. These costs are entered in the recipient's NIST-1022C form, under Section A "Personnel."

In general, compensation paid for employees should be consistent with compensation paid for similar work within

the proposer's organization and similar positions in industry or academia. Annual escalation rates should be reasonable and should also reflect industry or academia norms.

Personnel costs should not include compensation for administrative staff or other support staff if the applicant normally charges such compensation as an indirect cost. Since commercialization and product development activities are not eligible for funding in a TIP project, budgets should not include costs for marketing, sales personnel, or personnel involved in other commercialization or product development activities.

If senior executives are listed under Personnel, explain whether their project activities are exclusively technical and whether they are engaged in other, nontechnical activities. Again, only personnel involved in technical project tasks are included in this section. If it is the standard practice for the organization to charge executive salaries as a direct cost rather than as an indirect cost, then such costs should be included under the Personnel category. If normally charged as indirect costs, executive salaries should be removed from the Personnel category.

It is important to note that NIST limits the annual salaries of project personnel to no more than Level I of the U.S. Office of Personnel Management's Executive Schedule. Note that the salary amount will be annually updated in the FFO notice. If a project is selected for funding, any salary that exceeds this limit will be reset to the maximum level allowed.

Blended labor rates (i.e., rates that cover a labor category or skill set rather than a specific task) may be used in lieu of actual salaries for estimation purposes. These rates can be considered in the proposal evaluation process. If a TIP award is made, the award terms will require that the recipient ensures that only actual costs incurred will be charged to the award.

Fringe benefits are generally considered to be indirect costs. However, if the recipient's accounting practice is to charge fringe benefits as direct costs, then fringe benefits should be listed under Section F "Other" and not under Section A "Personnel."

If graduate or post graduate students are listed, NIST reserves the right to limit the number that can participate. For each graduate student or post graduate student listed, indicate the specific research tasks in the technical plan requiring their participation and whether or not this position is expected to be rotated on a regular schedule to another graduate student. Describe the research activities each student will contribute and how the project would proceed if the student contribution were not approved. If the position is expected to be rotated, provide the details of that rotation schedule and why it will not adversely impact the project task timeline. If an award is made, names of students, when identified, will be required to be listed in the personnel category of the budget narrative. Participation by undergraduate students is not allowed.

Note that tuition remission or other forms of compensation in lieu of wages paid to students working on TIP projects may be

allowed but only as provided in 2 C.F.R. 45 a. and b. (formerly OMB Circular A-21, Section J.41). In such cases, tuition remission is considered a cash contribution rather than an in-kind contribution and entered under "Other" costs.

Student compensation in the form of a salary paid to the student should be included under Section A "Personnel" for each student. Student compensation in the form of tuition remission or other forms of compensation in lieu of wages should be listed under Section F "Other" with a clear methodology for the computation that links back to the number of students.

- b. Travel Costs.** Project travel represents a coherent part of a project's communications strategy and should promote the smooth coordination of research activities among participants. Project travel costs are direct project costs and should be entered on the recipient's NIST-1022C form, under Section B "Travel."

Each planned trip must directly support project R&D activities and each trip and each traveler must be deemed essential for the successful completion of the project. Project travel that is not justified from a project perspective is not allowed.

While foreign travel is not precluded, it is discouraged and requires stronger justification than that required for domestic travel. Likewise, travel to customer or vendor sites is not allowed unless a strong justification is provided.

Conference travel is generally not considered an R&D-related expense and typically is not allowed. If attendance at a conference is deemed to be critical to the performance of accomplishing a specific research activity, approval may be given if a strong justification is provided. Note that it is not adequate to simply state that the proposed traveler will attend a specific conference to network with experts that might help the project. Also note that travel costs for conferences that the proposed traveler annually or otherwise normally attends are not allowed.

Travel costs for contractors should be combined with other contractor expenses and entered under the Contractor category rather than under the Travel category. Travel to NIST should be excluded as meetings with the TIP project management team are typically held at project participants' facilities.

When planning travel costs, note that TIP recipients are expected to adhere to all Federal Travel Regulations such as traveling in coach rather than first-class accommodations and abiding by federal per diem rates. Information regarding federal per diem rates is located here: <http://www.gsa.gov/perdiem>.

- c. Equipment Costs.** Equipment purchases include tangible, nonexpendable, personal property such as machines, tools, or other hardware items that are necessary for the successful completion of the project. In general, equipment purchases must have a useful life of at least one year or an acquisition cost of at least \$5,000 per unit. All equipment purchases should be clearly identified in the research plan and entered as direct project costs on the

recipient's NIST-1022C form, under Section C "Equipment."

For equipment that will be custom built, and that is expected to have a final constructed cost of at least \$5,000 and a useful life of at least one year, list each component that is being purchased to construct the custom equipment under Equipment, and not under Materials and Supplies.

Purchase of any piece of equipment that exceeds \$100,000 requires additional justification. If this purchase is outside of the United States, the justification must also include the reason for not purchasing it from a domestic source. If this type of equipment is typically leased, provide justification as to why it cannot be leased or a service provided in lieu of purchase. Note that large equipment purchases should be carefully timed and additional justification is required if such purchases are planned in the final months of a project.

Depreciation, maintenance, and service contract charges associated with equipment purchases are normally charged as indirect costs. If the recipient's accounting system normally identifies such costs as direct costs, however, then these costs should be entered under Section C "Equipment."

Note that TIP funds may not be used for the construction of new buildings; however, they may be used for construction of experimental R&D facilities to be located within a new or existing building provided the equipment or facilities are essential for carrying out the research.

General-purpose office equipment, e.g., office computers, printers, copiers, etc., are normally included in indirect costs and should not be budgeted as direct costs. If they are not included in indirect costs, then they may be included as a direct cost, however, they must be used exclusively for the TIP project, and a justification and explanation must be provided (e.g. computers used solely for research activities.) Note that the purchase of office furniture is not allowed.

- d. Materials and Supplies Costs.** Materials and Supplies include all items that are consumed, employed, or expended in carrying out the technical tasks of the project. All such purchases should be detailed and related costs should be entered as direct costs in the recipient's NIST-1022C form, under Section D "Materials and Supplies."
- e. Contractor Costs.** Contractor costs are considered to be direct costs and should be entered in the recipient's NIST-1022C form, under Section E "Contractors." Contractor costs therefore should not include charges for office supplies, conferences, workshop expenses, or other costs normally charged as indirect costs.

Contracting costs must reflect industry norms and current market prices. If such costs exceed industry norms, a written justification is required. Contractors with daily fees in excess of \$550 per day must provide a written justification or revise their fees accordingly. The use of foreign contractors also requires a written justification along with a completed NIST-1022H form "R&D Work Performed Outside the United States by the Recipient or Contractor Questionnaire."

- f. Other Costs.** Other direct costs that do not fall within the categories listed above should be included in the recipient's NIST-1022C form under Section F "Other Costs." These costs typically include audit costs, licensing expenses, fringe benefits, third party in-kind contributions, and sub-recipient direct costs.

Project audit costs should be included in this category unless the audit is included under indirect costs or is to be performed by a cognizant federal audit agency, for instance, the Defense Contract Audit Agency (DCAA). If it is included under indirect costs or to be performed by a cognizant federal audit agency, indicate it as such. If a joint venture, each joint venture participant should budget for its own audits individually.

Note that audits must be conducted by an independent Certified Public Accountant (CPA) or cognizant federal audit agency auditor. For projects of less than 24 months, an audit is required at the end of the project; for 2, 3, or 4-year projects, an audit is required after the first year and at the end of the project; for 5-year projects, an audit is required after the first year and the third year and at the end of the project.

The cost for the first year audit should be included in the Year 1 budget, to assure that the funds are obligated to cover the audit, even though the funds will be expended in Year 2. Similarly, the cost for the Year 3 audit should be included in the Year 3 budget. The final project audit cost should be included in the budget for the final year.

Fees, licensing expenses, and fringe benefits should be included under "Other Costs" if they are typically treated as direct costs. Otherwise, such costs should be included under "Indirect Costs."

Note that if a recipient has issued a subaward, then the "Other Costs" category should be used to capture the subrecipient's annual direct costs.

2. Indirect Project Costs

Indirect costs are those costs incurred for common or joint objectives and typically include costs for utilities, rent, and other administrative expenditures. TIP funds cannot be used to cover indirect project costs and all indirect project costs must be borne by recipients.

Note that the NIST-1022C form requires the recipient to enter the amount of annual indirect costs and the composite indirect cost rate that was used to calculate this amount. If this rate was negotiated with a cognizant federal audit agency, a copy of the approved negotiated agreement should be provided with the proposal. If this rate was not established by a cognizant federal audit agency, provide a statement to this effect. Successful applicants will be required to obtain such a rate.

If a subaward has been issued, the recipient is also required to enter the annual amount of the subrecipient's indirect costs if the subrecipient's indirect costs will be included in the recipient's cost share commitment.

It is strongly suggested that the NIST-1022 "Family of Forms" be used by recipients as the budget forms for their subrecipients. If an award is issued, each subrecipient can prepare a separate set of NIST-1022C forms to provide to the recipient to track all project costs incurred by their subrecipients. Therefore, it is suggested that the NIST-1022 "Family of Forms" be shared with proposed subrecipients to help the proposer with proposal budget estimates. **(Note that subrecipients' budget forms are for use by recipients and subrecipients only and should not be submitted with the TIP proposal.)**

Applicants should also check each proposed subrecipient's indirect cost rate to be sure that it is approved by a cognizant federal agency. If a subrecipient does not have an approved indirect cost rate, the recipient is responsible for making sure the subrecipient establishes its own, separate, federally approved indirect cost rate. For additional information refer to "Department of Commerce Financial Assistance Standard Terms and Conditions (March 2008)," Section A, paragraph .05, "Indirect Costs," <http://oamweb.osec.doc.gov/docs/GRANTS/DOC%20STCsMAR08Rev.pdf>.

Additional guidance on creating an indirect cost rate plan for the Department of Commerce as the cognizant agency, can be obtained by contacting the Department of Commerce Office of Acquisition Management, Grants Management Division at (202) 482-4248.

Applicants are cautioned that overstating estimates of indirect costs in order to meet cost share requirements in the proposal submission may cause serious cost share compliance issues, if an award is issued and the project cost share is at or near 50%. Indirect Cost Rate Proposals are required to be updated annually, based on the previous year's audited costs. Therefore, it is prudent to be aware of how your organization's indirect cost rate may vary from year to year.

Applicants do not have to claim the full value of their proposed indirect cost rate, even if the proposed rate has been approved by a cognizant agency. Applicants are encouraged to consider how sources of funds and indirect cost rates for the proposed cost share commitment may shift during the life of a project, and therefore should consider practical strategies for maintaining the proposed cost share levels being submitted, if an award is issued. This is especially true for applicants proposing a cost share commitment at or near 50%. Due to the fact that TIP projects have statutory time limits, a suspension may be requested or required to resolve severe cost share compliance issues. If the issue cannot be resolved, an award can either be terminated for cause or an award recipient can elect to end the award early for financial reasons.

E. SOURCES OF FUNDS

Project budgets must also include an accounting for all funds required to complete the TIP project. TIP project funds must come from both federal funds and nonfederal funds.

1. Federal Sources of Funds

Federal funds are funds provided under a TIP award and can only be used to cover direct project costs. TIP projects allow for the

participation of other federal agencies or governmental laboratories as joint venture members, contractors, or subrecipients. The only sources of federal funds, however, that can be used on a TIP project are those funds provided by TIP through a TIP award. Therefore, when other federal agencies or governmental laboratories contribute to cost share on a TIP project, they must provide funds that come from a source of nonfederal funds. Generally, federal funds supporting other grants and contracts cannot be used as cost share. Very rare cases exist, however, where projects under another federal program may have a specific statutory exemption from this regulatory prohibition. Applicants that are considering including Federal funds from another program as cost share under a TIP proposal are advised to contact the existing funded program for guidance regarding this issue. It is highly unlikely that the statutory requirements of the TIP program will be acceptable to the other program.

2. Nonfederal Sources of Funds

Nonfederal funds are funds provided by the recipient(s). These funds can come from a variety of sources including the recipient's internal funds (derived from working capital, retained earnings, profits, cash, etc.), cash contributions provided to the recipient (from subrecipients, joint venture members, state grants and other support, or other financial backers/investors), or in-kind contributions provided to the recipient by third party contributors. Contractors may not contribute resources to cover project costs.

3. Third Party In-Kind Contributions

Third Party In-kind contributions can be made by any nonfederal, third party source (except contractors working on a TIP project). Third party in-kind contributions can include but are not limited to equipment, research tools, software, supplies, and/or services.

The value of in-kind contributions shall be determined in accordance with 15 CFR §14.23 and must be prorated according to the share of total use dedicated to the TIP project. Note that the method of valuation must be based on the costs to be incurred during the project to specifically accomplish project activities and not upon the value of previously incurred (i.e., sunk) costs used to obtain or develop the item(s). For example, costs incurred to develop software are not allowable, but the typical license fee and costs to maintain the software during the project may be allowable. In addition, costs incurred to support a "complementary" project that is not directly required to accomplish activities in the proposed TIP project would not be allowable as cost share.

Additionally, as with the Federal share, all cost share, including third party in-kind cost share must be allowable under the following applicable Federal cost principles available at <http://www.nist.gov/tip/helpful-resources.cfm>:

- For-profit companies: 48 C.F.R. Part 31.
- Educational Institutions: 2 C.F.R Subtitle A, Chapter II, Part 220 (OMB Circular A-21).

- Nonprofit organizations: 2 C.F.R. Subtitle A, Chapter II, Part 230 (OMB Circular A-122).
- State and Local Governments: 2 C.F.R., Subtitle A, Chapter II, Part 225 (OMB Circular A-87)
- Hospitals: 45 C.F.R. Part 74, Appendix E.

Pursuant to 15 C.F.R. § 296.10 Third Party In-Kind Contribution of Research Services, NIST shall not issue a TIP award to a single recipient or joint venture whose proposed budget includes the use of third party in-kind contribution of research as cost share, and no costs shall be incurred under such a TIP project, until such time as an agreement between the recipient and the third party contributor of in-kind research has been executed by both parties and approved by NIST.

Research services in this context mean that research activities will be performed that are not typically obtained as a vendor service. For example, procuring analytical services from a laboratory is typically a vendor service and not a research activity. If the third party performer will be developing how the research outcome will be accomplished and there is significant risk that the outcome may not be possible, it is highly likely that a research service is being performed and an agreement, as described in 15 C.F.R. § 296.10 Third Party In-Kind Contribution of Research Services will be required before an award can be issued. Any applicant that is considering this option is strongly advised to call TIP for more guidance. Note that in-kind contributions provided by project participants are considered to be cash contributions.

F. FINAL BUDGET AND BUDGET NARRATIVE REVIEW

Once the budget forms have been filled out it is important to provide a final check of the budget and budget narrative before submitting the proposal. A poorly prepared budget or budget narrative may result in a proposal being considered less competitive or even noncompetitive.

Check to make sure that each section of the budget narrative is **complete** and that no relevant information is missing. Each section must be filled out and a proper accounting must be made of all budgeted items. It is particularly important that Section 2 "ALL SOURCES OF FUNDS" and Section 3 "TASKS" of the NIST-1022E (single company) or NIST-1022F (joint venture) "Estimated Multi-Year Budget" forms be filled out.

Check to make sure that all budget entries are **consistent**. An item that appears in different places in a budget should have the same value. For example, each of the sources of funds that appears in Section H of the annual NIST-1022C forms should be the same as those listed on the NIST-1022E form (single company proposals) or the NIST-1022F form (joint venture proposals.)

Check to make sure that all tasks and costs are **appropriate and in compliance** with TIP's terms and conditions. Budgeted tasks must be justified and relate to the proposed technical work. Cost estimates should not be significantly overstated or understated and



must reflect industry and market norms. Recipient cost share must be greater than or equal to 50% of the annual total project cost.

Finally, be sure then to check all arithmetic for ***accuracy***.