

## 2024 BIG Idea Challenge Budget and Cost Notes Instructions

1. Budgets must be provided in table format (using the provided [Budget Template](#)) and must also include [Cost Notes](#) explaining the proposed expenses, as described in the Cost Notes section below.
2. Due to the nature of the funding sources for the BIG Idea Challenge, which comes from two different funding sources and contracting mechanisms within NASA, *the budget must be displayed as two separate phases, clearly distinguishing between Phase 1 and Phase 2 costs.*
  - a. [The Phase 1 budget must equal 50% of the total funding requested and cover costs from February 2024 – June 2024.](#)
    - i. Phase 1 funds will be sent from NIA directly to the primary BIG Idea Challenge university; therefore, any IDCs in Phase 1 should be from the primary proposing university.
  - b. [The Phase 2 budget must equal 50% of the total funding requested and cover costs from July 2024 to December 2024.](#)
    - i. Phase 2 funds will be added as an addendum to the base award between NASA and your state's Space Grant Consortium, and then sent to your university via the internal mechanisms in place between your State Space Grant Consortium and your university. Therefore, the Phase 2 budget should also include any IDCs associated with the lead institution's creation of the subaward to fund the selected BIG Idea proposing team. This means BOTH relevant university and Space Grant IDCs should be included in Phase 2.
      1. The proposing institution must collaborate with the Space Grant Consortium in the creation of the Phase 2 budget.
3. Although an in-person culminating Forum is currently planned for November 2024 (Quarter 1 of Fiscal Year 2025), it is contingent on continued availability of NASA funding in FY25.
  - a. [Proposed budgets must include travel to the 2024 BIG Idea Forum, scheduled to take place in Hampton, VA in the Fall. Teams should assume a four-night hotel stay and a registration fee of \\$500 per person.](#)
  - b. [Cost notes should also include a brief description of how the travel funds will be utilized if there is no in-person Forum.](#)
    - i. If a Forum is not held, finalist teams will be notified no later than July 15<sup>th</sup> that they can re-align the budgeted travel funds as alternatively proposed.

## 2024 BUDGET COST NOTES TEMPLATE

1. Justify/explain each budget line item **in the order it appears in the [BIG Idea formatted budget template](#)** using this document as a guide. A sample budget matching the example cost notes below has also been provided in the template, for reference.
  - a. Please check to ensure that all formulas are correct on the budget template, especially when making changes/additions to the existing document.
  - b. Please leave formulas in the clickable cells, so that program staff doesn't have to guess at how you arrived at budget figures.
2. Include specific dollar amounts for materials when known.
3. Rounding up is acceptable.

### A. DIRECT LABOR

Describe all personnel costs as indicated below.

#### Example – Key Personnel:

Salaries for all named personnel are based upon current university academic and staff salary scales. All personnel budget calculations include salary range adjustments and merit increases as applicable for each year of support in accordance with university policy.

Salary for John Doe - 2 month(s) at 6% effort is requested for the Principal Investigator in each phase of the project and is calculated based on the institutional base salary policy. John Doe will be responsible for the overall coordination of the project and the supervision of the graduate students and other project personnel. *Change and/or insert description of faculty role/function as needed.*

Provide similar information for all other Key Personnel listed on the budget.

#### Example – Other Personnel:

2 graduate students are expected to work on the project for a total of 300 hours each (150 hours in Phase 1 and 150 hours in Phase 2), at a rate of \$20.00 per hour. \$6,000 is requested for Phase 1 and \$6,000 for Phase II to support the BIG Idea competition. *Insert description of grad students' role/function here.*

3 undergraduate students will work on the project for a total of 400 hours each (20 hours each for 10 weeks in each phase) at the rate of \$14.00 per hour. \$8,400 is requested for Phase 1 and \$8,400 for Phase II to support the BIG Idea competition. *Insert description of Undergraduate role/function here.*

Provide similar information for all other personnel listed on the budget. Stipends for student work/research should be included in this section.

**B. FRINGE BENEFITS**

List actual fringe rates for each relevant category (i.e., regular faculty, full-time professional & research personnel, graduate research assistants, undergraduates, and hourly employees).

Example:

The fringe rate is 30% for faculty and 4% for all students. These are actual fringe rates charged to projects effective January 1, 2022.

**C. EQUIPMENT**

Equipment is defined as any single item more than \$5,000. List all capital equipment to be purchased or fabricated for use on the project above \$5K. Specify how item will be used to support the proposed research activity and include in which phase it will be purchased.

Example:

\$7,500 is required in Phase I for a XX to achieve chamber pressure of ~XX when testing XX. \$8,000 is required in Phase II for a XX sensor, which will provide XX data.

**D. DOMESTIC TRAVEL**

Include travel expenses for the 2024 Forum and any travel required for testing. **Note that proposals must include travel to Forum, currenting scheduled to take place in Hampton, VA (NASA's Langley Research Center). Assume four-night hotel stay and a registration fee of \$500 per attendee. Cost notes should also include a brief description of how funds will be utilized if there is no in-person Forum.**

Example:

Travel funds in the amount of \$16,075 are requested for 10 individuals: Faculty advisors and students to attend the 2024 BIG Idea Forum in November 2024 (Phase 2). The cost of travel is calculated for 5 days 4 nights and includes Forum registration (\$500 each), airfare, lodging, per diem, and ground transportation. The cost of airfare and ground transportation is based on estimated costs and lodging and per diem costs are based on rates as established by the GSA.

If there is no in-person Forum, the travel funds will be re-aligned to use toward additional vacuum chamber tests, as well as labor hours for graduate students to conduct the additional testing.

Cost category	Rate	# of People	Total
Registration	\$500/person	10	\$ 5,000
Airfare	\$350/person	10	\$ 3,500
Lodging (4 nights)	\$113/night x 4 nights	10	\$ 4,520
Meals & incidental expenses (4.5 days)	\$59/day x 4.5 days	10	\$ 2,655
Ground transportation	\$40/person	10	\$ 400
		<b>Total</b>	<b>\$16,075</b>

**E. OTHER DIRECT COSTS**

For each of the other direct costs items below that are in your budget, briefly detail what the items are to be purchased and applicability to proposed project. Make sure you report the items in the same categories as they appear in your prepared budget.

**Materials and Supplies:** (i.e., consumables, lab supplies, chemicals, etc.)

This information should be presented in a table, with specific/estimated costs provided by Phase. Include unit prices and quantities for each supply category, when known.

Example:

Item	Cost per item	# of items	Phase I	Phase II	Total
Three Neck FB Flasks (100 mL)	\$45.00	7	\$315	\$0	<b>\$ 315</b>
Form 3 3D Printer	\$2,988	3	\$8,964	\$0	<b>\$ 8,964</b>
Digital Hotplate	\$350.5	2	\$ 701	\$0	<b>\$ 701</b>
12 lbs. of JSC-1A simulant	\$3,000	1	\$0	\$3,000	<b>\$ 3,000</b>
Piping for Vacuum Chamber	\$500	3	\$0	\$1,500	<b>\$ 1,500</b>
		<b>Total</b>	<b>\$9,980</b>	<b>\$4,500</b>	<b>\$14,480</b>

**Testing Costs or Facilities Rental:**

Item	Cost/hour	# hours (Phase I)	# hours (Phase II)	Phase I Cost	Phase II Cost	Total
Univ. Vacuum Chamber	\$80.00	55	5	\$4,400	\$400	<b>\$ 4,800</b>
University Welding Dept.	\$50.00	60	0	\$3,000	\$0	<b>\$ 3,000</b>
			<b>Total</b>	<b>\$7,400</b>	<b>\$400</b>	<b>\$7,800</b>

**Consultants:**

Describe anticipated services to be provided by the consultant(s). Describe the basis of the cost estimate by Phase (i.e., \$X/ hour, X hours, travel costs, and total estimated costs).

**Services:** (i.e., paying a third party to run data analysis)

Detail basis of cost estimate and applicability to proposed project, by Phase.

Example:

Jane Smith of Grandiose Space Org (GSO) will be used to evaluate our test plan. She can conduct the work remotely, at an estimated cost of \$400/hour for 18 hours (\$7,200 total). This work will be conducted during Phase 1. Please see Jane's Letter of Support attached to the proposal.

**Subcontracts/Subawards:**

List all subawards (including subcontracts to any partnering universities) and provide a short description of the work to be performed. A detailed subaward cost breakdown by Phase should be included here in the budget cost notes section only.

**Miscellaneous:** For items that do not fall within the specified Other Direct Cost categories above, itemize in this section and include the basis of the cost estimate, by Phase.

**F. TOTAL DIRECT COSTS (A+B+C+D+E)**

**G. INDIRECT COSTS**

**i. University Indirect Costs (Phase 1 and Phase 2)**

a. List IDC rate, Cognizant Federal Agency, and contact information

**ii. Space Grant Indirect Costs (Phase 2)**

**iii. Total**

Example:

University IDC - For Phase I (\$22,378) and Phase II (\$20, 575.50), these are calculated at 50% on a Modified Total Direct Cost basis (excluding equipment over \$5,000/item). These charges are consistent with XXX's current federally negotiated indirect cost rate with XXX Agency, effective XXX date.

Space Grant IDC - For Phase II (\$4,915.10), these are calculated at 10% on Total Direct Costs, which is the limit for the XXX Space Grant Consortium.

<b>Item</b>	<b>Phase I</b>	<b>Phase II</b>	<b>Total</b>
University IDCs	\$22,378	\$20,575.50	<b>\$42,953.50</b>
Space Grant IDCs	n/a	\$ 4,915.10	<b>\$ 4,915.10</b>
<b>Total</b>	<b>\$22,378</b>	<b>\$25,490.60</b>	<b>\$47,868.60</b>

**Total IDCs:** \$22,378 in Phase I + \$25,490.60 in Phase II = **\$47,868.60**