Office of Contracts and Grants
Cost Estimation Tool Business Processes
June 2019

The cost estimation tool is a CU Boulder OCG internal tool used for the purposes of estimating proposal budgets. Unless otherwise noted in a proposal file, the cost estimation tool is generally not submitted to a sponsor and is not the proposed budget of record. The cost estimation tool is to be used for all proposals, except NIH and NASA fellowships and some very simple budgets.

Following are the business processes related to using the cost estimation tool. Proposal Analysts assigned to each department provide expert guidance on developing budgets in consult with PIs. Contact us any time for assistance.
The cost estimation tool has 8 tabs:

- Estimation – Provides estimated budget details
- Travel Table – Provides detailed travel table to be used in budget justifications. Formatting is appropriate for NSF requirements.
- Budget Form – Provides a template that can be used for the proposed budget of record when a sponsor does not have a prescribed template. When we have discretion over the proposal budget format, send the Budget Form with as little detail as possible. The Budget Form tab can be printed to PDF.
- Industry – Final budget formatted for use with industry sponsors with cost categories including indirect costs as applicable. Whenever possible, send the industry formatted budget only to industry sponsors. The Industry tab can be printed to PDF.
- IDC Addendum – Internal approval form used if a government agency or non-profit organization has a policy that limits allowable IDC, corporation is flowing down federal terms that limit indirect costs, or project is a rate-based service agreement managed through a Fund 33.
- 1-CS Summary – Cost Share Addendum for internal cost share approval
- 2-CS In-Kind – Documents in-kind cost share from CU Boulder and third party
- 3-CS External – Documents external cash cost share from a subcontractor or other third party

General Notes
- **DO NOT** delete any rows or columns on any of the tabs. The totals will not sum correctly if any rows or columns are deleted.
- Rows can be added in each section (i.e. within Salaries and Wages, within Fringe Benefits, etc).
- Do not add columns between Column A and Column BG.
- You can hide rows and columns that are not needed.
- Rows sections A. Salary and Wages, B. Fringe Benefits, C. Capital Equipment, D. Travel, E. Participant Support can be repurposed for any costs in that category. F. Other Direct Costs rows can be repurposed except for Subcontracts rows 155-161, Off-site facility rental row 185 and Tuition row 186. Drop down menus for budget categories (Column A) for each section are available on every row, highlighted with light gold.
- Some cost categories can be collapsed and expanded (Capital Equipment, Domestic Travel, International Travel, Participant Support and Subcontracts) by clicking on the "–" or "+" sign on the far left of the spreadsheet.
- If the template is used as originally set up, formulas are built in for salaries when using the Person-Months table (columns AJ-BG) as well as inflation in salaries and fringe benefits, fringe benefits for each person, subtotals for each category, direct costs, and total costs. These can all be edited.
- Enter the number of budget periods in cell AK12. Salary and tuition will 0 out for budget periods not in use.
- If the budget is less than 5 years, you can hide unused columns.
- Column AJ can be used for 12-month "Base Salary" for NIH budgets.

- If you select "No" in cell AK13, inflation will be excluded for fringe benefits and tuition in Year 1; selecting "Yes" will cause fringe benefits and tuition to be inflated beginning in Year 1. Select "Yes" if the start date is on or after July 1. If no selection is made, inflation is excluded from Year 1.
- Cost share columns are built in to the template. In the template titled "Cost Estimation Tool" (vs. "Cost Estimation Tool with Cost Share") these columns are hidden. To unhide, click the top corner of the Excel worksheet, right click, and select Unhide All. You can re-hide years that aren't needed. Cost Share columns can be repurposed as necessary (example: foreign currency exchange rate calculation).
- For budgets with direct distribution (such as for NASA proposals) or foreign currency contingency fee, unhide rows 205 through 208, update budget item description and enter amount of budget item for each year. If a cost is included on row 206, Total Amount Requested on row 208 will sum this row. These items will not auto populate to the Budget Form or Industry Tabs.
- When separate budgets are requested for separate Speedtypes by department, add a tab to the template for each department's budget.

Steps for Using the Cost Estimation Tool Budget Template
1. Estimation Tab

Fill in information at the top of the estimation tool, including title, PI, Co-PI(s), project duration, number of budget periods, and make Yes/No selection for start date after July 1.
Enter all costs on Estimation tab as detailed below, following CU Boulder proposal budget practices. For each category, check subtotal formulas after entering information. OCG provides budget guidance online in the Detailed Proposal Process.

A. Salaries and Wages
   This section should include:
   - The role and name, if known, of the PI and all project personnel paid on the project
   - % effort and number of months for each person with AY, summer or CY
   - Salary for each year using applicable formula.
   - Employment category – Choose the employment category from the drop down menu in Column A for each person or group. This will select the correct fringe benefit rate in the B. Fringe Benefits section.

Effort can either be typed directly in to the row below personnel name or entered using Columns AK-BE. To use Columns AK-BE:
   - Formulas are included for non-GRA and non-hourly employees.
   - Enter Base Salary for 100% time 9 or 12 months in Column AJ, including applicable inflation for Year 1.
   - Check Appt. Mos. – Refers to an individual's 9 or 12 month appointment. Enter 9 or 12 as applicable. Must be same number of months reflected in the base salary.
   - AY/CY/Sum. – Enter Academic Year, Calendar Year or Summer.
   - % – Enter percent time per month to be worked on this project for each year.
   - # Mos. – Enter number of months to be worked on this project for each year.
   - P-Mos. – Person months for the year will auto-calculate.
   - Once these details are added, % time and months will auto populate under Salaries and Wages based on Year 1.
   - Salary for each year will also auto populate with inflation each year.
   - If effort will vary from year to year, you will need to manually enter the effort for subsequent years in % and # Mos. Columns in AQ-BD as appropriate.

Note:

- *Proposal Analysts will verify all salaries and calculations.*
- *Current **Graduate Research Assistant salaries** are available on OCG's Frequently Needed Information web page.*
- ***Inflation** is applied to salaries per University inflation rates and budgeting practices. Current inflation rates on OCG's Frequently Needed Information web page.*

B. Fringe Benefits
    For each person or TBN personnel, enter:
    - Role and name, if known. This information will auto populate from the Salary and Wages personnel.
    - Fringe benefits using the applicable formula for each person. The template automatically calculates using the rate listed in Column H with applicable inflation factor. The selection in cell AK13 will exclude or include inflation beginning in Year 1 as applicable.
    - Column C, fringe benefit rate – Auto populates based on entry in Column A, which auto populates from selection in Salaries and Wages section.

Note:

- ***Fringe benefit rates** are applied per University's current negotiated rate. Current fringe benefit rates on CCO's Fringe Benefit Rate History web page.*
- ***Inflation** is applied to fringe benefits per University inflation rates and budgeting practices. Current inflation rates on OCG's Frequently Needed Information web page.*

C. Capital Equipment
    For each piece of equipment, enter:
    - Name of equipment
    - Cost per year

Capital Equipment *is one piece or fabrication of a piece of equipment costing $5,000 or more with a useful life of more than one year. This includes software with cost of $5,000 or more per unit.*

D. Travel
    For travel:
    - Divide and identify Domestic and International travel
    - Enter costs for travel items: airfare, per diem, ground transportation, rental car
    - Formulas are built in to Column J to figure travel if you enter numbers in Columns E, F, G and H. To use the Column J formulas, enter Cost of travel item, No. Days, No. People and No. Trips in Columns E-H. This will prompt the template to automatically calculate total costs.
    - No. People and No. Trips will copy from entry on the Airfare row
    - Alternatively, you can overwrite the formulas in Column J
    - Include conference registration in other direct costs section below

Note:

- *Provide as many details about travel as known, including location, number of days, number of trips.*
- *Per diem is budgeted per GSA (most domestic), Department of Defense (Alaska, Hawaii, U.S. Territories), or Department of State (international)*
- *Separate Domestic and International travel.*
- Mileage rates follow Colorado rates, not federal rates, and can be found at https://www.colorado.gov/pacific/osc/mileage-reimbursement-rate

E. Participant Support

Enter participant support costs, including:

- Enter costs for participant support items: stipend, travel, subsistence and other.
- Enter Cost and No. Participants in Columns E & F. This will prompt the template to automatically calculate total participant support costs.
    - Alternatively, you can overwrite the formulas in Column J

Participant Support can only support non-CU employees and trainee expenses. Do not use this category for NIH proposals, unless specified in FOA.

F. Other Direct Costs

- Other Direct Costs is divided in to sections similar to the most common sponsor budgets. These do not need to be used.
- Any line in this section can be used for any other direct costs; however, to use the built in MTDC Base calculation on row 193, do not repurpose rows 173-179 for subcontracts or rows 185 and 186, which are all excluded in the MTDC base.
- For each item enter:
    - Direct cost item name
    - Cost for item
- Subcontracts:
    - Use rows 173-179 only for subcontracts. If these are used for other items, formulas in row 191 for Total Costs less Sub Indirects for NIH budgets, row 193 for MTDC base, Budget Form and Industry tab, will not calculate correctly.
    - Subcontract costs do not need to be separated in to direct and indirect costs for sponsors other than NIH.
    - Update the MTDC base (row 193) to include the first $25,000 for each subaward. Unless a sub has less than $25,000 in the first year, enter number of subs in G193 and MTDC base will update to correct amount. If a sub has less than $25,000 in the first year, update the formula in Year 1 to reflect this, and other years as needed.
- Off-site facility rental:
    - Use this budget category for off-site facility rental that is exempt from F&A.
    - The MTDC base on row 193 excludes this cost.
- Tuition Remission:
    - Tuition for each GRA is budgeted per the Graduate Student Appointment Manual and current CU in-state tuition rates with applicable inflation.
    - Use this row only for tuition remission, since this row is used for the MTDC base.

G. Total Direct Costs

Total direct costs will calculate automatically as long as no rows are deleted and total formulas for each section are not changed.

H. Indirect Costs
- Indirect costs are formulated to calculate 54% of MTDC.
- For all other indirect cost rates:
    – Update the percent in cell H200
    – Update description
    – Update formula on row 201 if base is TDC or something other than MTDC

I. Total Costs and Total Amount Requested
Total costs will calculate automatically as long as no rows are deleted and total formulas for each section are not changed.

MTDC Base row includes a formula to calculate the MTDC base without any subs. This formula will need to be updated if subs are added, row 185 for Off-site facility rental is not used for off-site facility rental, row 186 for tuition remission is not used for tuition, or tuition remission is included on a row other than row 186.

2. Other Tabs
   A. Budget Form
      – The Budget Form will be used to provide a proposed budget of record to the sponsor:
         – When the sponsor does not have a prescribed budget form.
         – With as little detail as required by the sponsor.
         – In Excel format with other tabs hidden or in PDF format.
      – Information at the top of the form as well as all costs auto populate from the Estimation tab.
      – This tab may be used to generate a budget for a fixed price contract, showing only the total amount of request.
      – No action needs to be taken on the Budget Form by PI or DRA.
      – Tab will be reviewed by OCG Proposal Analyst if needed.

   B. Industry
      – The Industry tab will be used to provide a proposed budget of record to industry sponsors:
         – When limited budget categories, fully burdened (i.e. labor includes salary, fringe and IDC, other categories include IDC as applicable) can be provided to the sponsor.
         – In Excel format with other tabs hidden or in PDF format.
      – Information at the top of the form as well as all costs auto populate from the Estimation tab.
      – If the F&A base is other than MTDC, change base in cell U26. If an F&A base other than MTDC or TDC is used, enter F&A base for Other costs on row 30.
      – For budgets that have the federally negotiated IDC rate and subawards, you will need to adjust the subcontracts row if sub costs are less than $25,000 in the first year and each out year until there are $25,000 in sub costs.
      – This tab may be used to generate a budget for a fixed price contract, showing only the total amount of request.

C. IDC Addendum
   –   Use this tab if the sponsor is a government agency, non-profit organization or corporation that is a prime contractor under a federal award and IDC is reduced based on sponsor policy.
   –   Except for the primary unit and sponsor name, the top portion of the form will auto populate from the Estimation tab.
   –   Complete the remainder of the form and print to PDF before routing for signature.

D. 1-CS Summary, 2-CS In-Kind, 3-CS External
   –   Use these tabs if the project includes mandatory or voluntary committed cost share.
   –   Some boxes on the top of the form will auto populate from the Estimation tab.
   –   Summary instructions for these forms are provided on the 1-CS Summary tab. Detailed instructions are available online. See Cost Share Instructions.
   –   Complete the pertinent sections of the forms and print to PDF before routing for signature.