## Guide to the Budget Worksheet for Pre-ERA Planning

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The Excel Budget Worksheet is available for planning purposes prior to creating the Funding Proposal and related Budget(s) in ERA. These include current rates and apply modified total direct costs (MTDC) calculation rules.

When using a Worksheet, download a copy and save it locally for your immediate use. Remember to return to the website to download the latest version when you start a new budget, as rates may have changed. Always work with the latest version posted.

The Budget Worksheet opens on the tab titled Spreadsheet. Before you begin entering information, be sure to click Enable Content (macros) at the top of the page. If using the Worksheet for less than the stated period of time (e.g. less than five-years), be mindful to zero out the years you won't be using to ensure there are no surprises throwing off your final budget totals!


Note that there is a Budget Summary tab to the left which pulls in line items by year/total from the Budget Worksheet.


There is also a Cost Sharing tab and a related Cost Sharing Summary tab. When using these, be careful to review sponsor guidelines as to which expenditure categories are allowed to count as cost sharing. These cost sharing pages have the same functionality as the Budget Worksheet and Budget Summary.


There is also a Fiscal Year RID Distribution Calculator on the last tab.


## ABOUT THE RATES USED IN THE BUDGET WORKSHEET

## Facilities and Administrative Costs (F\&A)

The default F\&A rate used is the approved rate for on-campus research. If a different approved F\&A rate is to be used, modify it in the Facilities \& Administrative Costs section below Total Direct Costs (See F\&A Modifications). Click on Cell B164 to display the dropdown menu. The F\&A wizard will assist you in determining the correct F\&A rate for your proposal. The Budget Worksheets are updated regularly to ensure that budgets accurately reflects anticipated costs.


## Employee-Related Expenses (ERE) and Tuition Rates

At the top of the Budget Worksheet, start and end dates are entered in rows 1 and 2. After the project dates are entered, be sure to click the green button immediately below. This macro automatically updates the Worksheet so that the ERE and tuition rates for the corresponding fiscal year(s) are used throughout.

- If a start date is 6 months or more into a fiscal year, the Budget Worksheet will calculate amounts using the following year's rates in order to accurately reflect anticipated actual costs.
- ERE rates in out years are based on ASU Finance projected rates.
- Tuition rates in out years escalate by $8 \%$.


A Tuition Remission Rates table is found at the bottom of the Budget Worksheet that details Academic Year, Summer and Total rates:


## Salary Escalation

Per ASU policy, a 3\% salary escalation is built in beginning with Year 1 (see line 5). The escalation factor may be removed in Year 1, for example, when hiring a new employee, or in all years when the sponsor has a written policy prohibiting salary escalation. If you have a situation you feel warrants removing the salary escalation, please speak with your assigned GCO during proposal preparation.


## CREATING A DRAFT PROPOSAL BUDGET

Begin on the tab titled Spreadsheet. At the top of Columns C-G, enter the following:

- Start \& end dates for proposed project - The PI's name
- Click Update ERE/Tuition Rates button - The PI’s e-mail
- The Sponsor's name
- The PI's phone number



## 1. Direct Costs

## 1.A. Salaries, Wages, Benefits \& Insurance

## Faculty Salaries

PI

- Enter PI's name in Column A (this will allow the name to autofill on the Budget Summary).
- Enter PI's Academic (AY) Salary. The Budget Worksheet will then calculate the Monthly Rate ( $\$ /$ mos over 9 months).
o This cell's formula can be modified if the PI has a 12-month appointment, becoming: =ROUND(D9/12,2)*\$H\$5.


0 If the PI is not a faculty member, but rather executive or service professional staff, the ERE rate used must be changed. Contact RAHelp@asu.edu for assistance, as modification will be required in several sections.

- To the right of the Monthly Rate, enter the number of months (\#mos) the PI is working during the Academic Year (AY) and/or the Summer (Sum).
- Enter the Percentage of Effort (\% effort) to be worked on the project (remember that one should not enter 100\%, rather $95 \%$ or $90 \%$, as faculty have other duties within any given time period corresponding to their academic responsibilities).
- The Budget Worksheet will now calculate the SUB-TOTAL Salary for Year One, and the corresponding ERE (the cell's formula references the faculty ERE rate listed below the Salaries \& Wages section of the Worksheet).
- Return to the left of this section and in Column B enter the Count $=1$.
- The Budget Worksheet will calculate the person months in the cell immediately above based on the \# mos and the \% effort entered. NOTE: This will be true for other salary lines as well.
- For all salary lines, out years are autopopulated with the same number of months and percentage of effort as in Year 1. If this will be different in the out years, you will need to update them. Or you can zero them out at this point and reenter when you enter each year's budget. (In this example, year 3 has been zeroed out as this is a two-year budget.)


Co-PI

- There are four Co-PI lines provided. Follow the PI instructions above for entering salary information.



## Staff Salaries

## Post Doctoral Associate

- Enter the Fiscal Year (FY) Salary. The Budget Worksheet will calculate the monthly rate.
- Enter the \# of months horizontally.
- Enter the \% effort.
- In Column B, enter the \# of staff (note that one could have multiple Post Docs at the same rate).
- The Budget Worksheet will then calculate the total Year 1 salary as well as the related ERE. It will populate the out years as well. (Again, in this example, year 3 has been zeroed out.)



## Staff and Administrative Staff

- Follow the same steps as the Post Doctoral Associate. The Budget Worksheet will calculate ERE using the staff ERE rate.
- Be cautious to follow CAS Exception/2 CFR 200 (Uniform Guidance) regarding administrative staff before including them in the budget. See the CAS sitelet for guidance.



## Graduate Research Assistants: Graduate Students-MS \& Graduate Students-PhD

- Enter the Academic (AY) salary. The Budget Worksheet then calculates a monthly rate.
- Enter the number of Academic (or Summer) months and percent of effort.
- In Column B, enter the number of AY students and the number of Summer students working (at the same rate).
- Now the Budget Worksheet will autocalculate Total Salary and corresponding ERE, calculated with the graduate assistant rate.



## Hourly Students

Hourly student workers can be either undergraduate or graduate students. As student workers, they do not receive tuition remission or healthcare benefits. Please follow your unit's policy for budgeting graduate students as hourly workers.

- Enter the Academic (AY) salary. For hourly student workers this will be their hourly rate x 1560 hours, per the cell noteyou will need to calculate that total separately. The Budget Worksheet then calculates a monthly rate.
- Enter the number of Academic (or Summer) months and percent of effort.
- In Column B, enter the number of AY students and the number of Summer students working (at the same rate).
- Now the Budget Worksheet will autocalculate Total Salary and corresponding ERE, calculated with the hourly student rate.


A total is given for Salaries \& Wages, adding the subtotals from the various Personnel categories, followed by the Benefits subtotal. The Total Salaries \& Benefits are then calculated.

## 1.B. Travel

Travel is divided into three types: In State, Out of State, and Foreign. Be mindful of the sponsor's rules regarding foreign travel and also which countries they consider to be foreign travel. Do not include consultant travel in this section - there is a specific line in Other Direct Costs below for those expenses.

It can be useful to use a separate Excel worksheet to outline all travel costs under each of the three categories (you can add a new tab within the same workbook). You may have several Out of State trips, for example, to different locations. In such instances, the separate worksheet will allow you to calculate your total costs for that category; you may then skip completing the various cells described below and simply enter total amounts for the specific line items in Column H .

- Use the per diem rate charts found on Financial Services’ website for meals and lodging rates by location.
- Enter the number of days and the total meals rate per day. This will total across.
- Enter the number of nights and the lodging rate per night. This will total across.
- Use a service such as Expedia or Kayak to calculate average plane fare and enter.
- Use a provider website to calculate average rental car cost, if anticipated, and enter.
- If travel is to a conference, enter the anticipated registration amount (use previous year's rates as reference, if current rate is not available), and enter.
- Add any additional anticipated costs (local transportation such as taxi, subway, etc.) and enter under Other (this amount will be added to the Transportation line immediately above).
- Note that the Budge Worksheet brings these same costs over into the out years. If the same travel is not anticipated, remember to zero these out or adjust accordingly.



## 1.C. Other Direct Costs

Enter the specifics for each line item. Except for consultants, you will be entering a total figure so again, a separate worksheet can be useful for adding up total costs for each line item. Be mindful whether the sponsor will allow certain line items, such as publication charges, and 2 CFR 200 (Uniform Guidance) rules regarding direct vs. indirect charges. Consult the CAS sitelet if you are unsure of any proposed items.
NOTE: The Budget Worksheet fills these line items across all years; if an expense is nonrecurring be sure to remove it from out years.

- 7310-01: Consultants - enter the daily rate and the number of days

Consultant travel - calculate separately and enter total

- 7310-22: Publication/Page Charges - enter total
- 7310-28: Photocopy Charges - enter total
- 7310-80: Computer Use Fees - enter total
- 7320-01: Office Supplies - enter total
- 7320-05: Materials \& Lab Supplies - enter total
- 7320-48: Computer Software - enter total
- 7325-22: Lab Equipment under $\$ 5,000$ - enter total
- 7330-01: Postage/Express Mail/Airborne - enter total
- 7330-06: Telephone/FAX - enter total
- 7390-16: Computer Connect Charges - enter total
- Rental/Equipment Use Fees - enter total
- Other - enter type of item on the line adjacent to "Other" and enter total



## 1.D. Modified Total Direct Costs

Modified Total Direct Costs are calculated. This is the amount to which the F\&A rate will be applied in standard fashion.
Line items with restrictions regarding F\&A are found below the Modified Total Direct Costs line.
In this section, note that tuition remission is autocalculated based on the information from the Graduate Research Assistants section.


For subawards/subcontracts, list each name where indicated in column E (so they autofill on the Budget Summary), and the total amount for each in the Subrecipient section. For each subrecipient listed, in the F\&A section that follows Total Direct Costs, F\&A will be calculated on the first $\$ 25,000$ of each total subcontract, using the approved rate listed. For any one subrecipient, any amount over $\$ 25,000$ will be excluded from the F\&A calculation.

NOTE: For Sub-Recipients, the amounts from Year 1 do not autopopulate to the out years.


## 1.E. Total Direct Costs

The Total Direct Cost amount is calculated using Modified Total Direct Costs and these Other Costs.

## 2. Total Facilities \& Administrative Costs (F\&A)

The F\&A total is calculated using the default rate, which is the approved rate for on-campus research. If a different approved F\&A rate is to be used, modify it in the Facilities \& Administrative Costs section below Total Direct Costs (See F\&A Modifications below).


## 3. Total Project Costs

A complete Total Project Costs amount is then calculated.
NOTE: Cells B2 and B3 will autofill with the totals from Total Project Costs for Year 1 and the Summary Total Project Costs.
On the far right side there is a column that crosschecks totals across the years-use this to see whether you may have broken any formulas as you complete the form. Summary Total Project Costs (here, P170) should equal the cell to its right.


Budget totals are found in the Summary tab. Progress to creating the Funding Proposal and associated budget(s) in ERA.


## MODIFYING F\&A RATES IN THE BUDGET WORKSHEET

## 1. Modifying the F\&A Rate to Reflect Project Type

Use the F\&A wizard for guidance in determining the correct F\&A rate for your proposal. When it is appropriate to modify the Budget Worksheet's F\&A rate to other than the default on-campus research rate, select the rate using the dropdown menu in cell B164, which will update the rates for all years in Column E accordingly.

Example: The proposal F\&A rate has been changed to the off-campus instruction rate of $26 \%$. Subcontract lines have also been updated to show the corresponding rate.


## 2. When a Project Qualifies for the Off-Campus F\&A Rate in Some Years but not Others

If a project qualifies for the off-campus F\&A rate in some years but not in others, modify the appropriate F\&A rate cells (found in Column E) to use the off-campus rate for the years the project qualifies and the on-campus rate for the other years. See the F\&A sitelet for on- and off-campus rate guidance.

## 3. Modifying the F\&A Rates to Reflect Start Date

F\&A rates do not automatically update based on the Start Date like the ERE and Tuition Rates. They must be modified manually.
If you need to adjust the yearly F\&A rates due to a project's anticipated start date, the following example illustrates those steps:

- Year 1's rate, $54.0 \%$, is the FY14 rate (cell E163 here).
- The proposed project begins September 2014 (FY15), so Year 1's rate needs to be changed to reflect the FY15 (Year 2) rate which is found in the cell below, E164. We see that FY15's rate is $54.5 \%$, so change cell E163 to reflect this.
- Essentially, each rate is moving up one line on the Budget Worksheet. As the following year's rate is also $54.5 \%$, no further changes are necessary.

- The result is as follows:



## ADDING ADDITIONAL FACULTY LINES TO THE BUDGET WORKSHEET

If there are more than four Co-PIs, use the purple "Add Faculty" button in the upper right corner. There is no limit to the number of additional Co-PIs that can be added. Any additional Co-PIs added to the Budget Worksheet will also be added to the Budget Summary page and to the two Cost Sharing pages.

NOTE: The "Add Faculty" function copies the first Co-PI line and adds the copy immediately below the first Co-PI. Identify in advance the total number of Co-PIs and add any additional Co-PI lines before you begin entering data in the first Co-PI line. Otherwise, that Co-PI’s information will be copied into the added Co-PI lines and will need to be cleared.


## ADDING ADDITIONAL STAFF LINES TO THE BUDGET WORKSHEET

Additional staff lines can be added to the Budget Worksheet. Another option is to list multiple positions on one line when the salary amount is the same, such as three programmers at $\$ 45,000$ each.

NOTE: The Post-Doctoral Associate line draws its ERE calculation from a different cell than the other three salary lines, so decide which type of staff position you need to add before copying. Additions must be inserted above the fourth line (Administrative Staff) to be included in the equation range for Staff Salaries totals.

Scenario: There will be two Post Doctoral Associates on the project at different salaries, and the Budget Worksheet has space for one.
Step 1: Copy the Post Doctoral Associate’s six-line block.

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|  | PROPOSAL BUDGE |  | Start Da | te: | /1/2014 |  |  |  |  |  |  |  | ARIZONA | STATE |  |  |  |  |  |  |  |
|  | Year 1 Total = | \$261,199 | End Da | te: 1 | 31/2016 |  |  | NSF |  |  |  |  | UNIVERS | TY |  |  |  |  |  |  |  |
|  | Summary Budget = | \$497,203 | CLICK TH | S AFTE | R Updat | ing Start | Date |  |  |  |  | ear 1 | Year |  |  | ar 2 | Year |  | Year 3 |  | Su |
| 4 | Sub-Total Fac | culty Salaries |  |  |  | 2 = \# | of senio | or perso | onnel |  |  | \$14,477 |  |  |  | \$14,912 |  |  | \$0 |  |  |
|  | Staff Salaries |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Post Doctoral Assod LOE Yr $1=$ | $\begin{aligned} & \\ & \\ & \\ & \hline 12.00 \end{aligned}$ | FY Sala person mo | ry: <br> nths | $\$ 45,00$ | $00$ | \$3,863 |  | 12.00 | 100.000\% |  | \$46,350 | \# mos = | 12.00 |  | \$47,741 | \# mos = | 0.00 | \$0 |  |  |
| 3 | \# of staff $=$ ? | 1.0 |  |  |  |  |  |  | SUB-TO | OTAL Salary= |  | \$46,350 | \% effort = | 100.000\% |  | \$47,741 | \% effort = | 0.000\% | \$0 |  |  |
| 3 |  |  |  |  |  |  |  |  |  | ERE |  | \$19,430 |  |  |  | \$20,613 |  |  | \$0 |  |  |
| ${ }^{3}$ |  |  |  |  |  |  |  |  |  |  |  |  | LOE = | 12.00 |  |  | LOE = | 0.00 |  |  |  |
| 1 |  |  |  |  |  |  |  |  | Total | Salary \& ERE |  | \$65,780 | \# of staff = | 1.0 |  | \$68,354 | \# of staff = | 1.0 | \$0 |  |  |
| $\frac{2}{3}$ | Staff: Data Manager LOE Yr 1 = |  | FY Sala person mo |  | $\$ 50,00$ |  | \$4,292 |  | 1.00 | 50.000\% |  | \$2,146 | \# mos = | 1.00 |  | \$2,210 | \# mos = | 0.00 | \$0 |  |  |
| 4 | \# of staff = | 1.0 |  |  |  |  |  |  | SUB-TO | OTAL Salary= |  | \$2,146 | \% effort = | 50.000\% |  | \$2,210 | \% effort = | 0.000\% | \$0 |  |  |
| 5 |  |  |  |  |  |  |  |  |  | ERE |  | \$900 |  |  |  | \$954 |  |  | \$0 |  |  |
| 3 |  |  |  |  |  |  |  |  |  |  |  |  | LOE = | 0.50 |  |  | LOE = | 0.00 |  |  |  |
| 7 |  |  |  |  |  |  |  |  | Total S | Salary \& ERE |  | \$3,046 | \# of staff = | 1.0 |  | \$3,164 | \# of staff = | 1.0 | \$0 |  |  |
| 3 S | Staff LOE Yr $1=$ | 0.00 | FY Sala person mo | nths |  | 0 | \$0 |  | 0.00 | 0.000\% |  | \$0 | \# mos = | 0.00 |  | \$0 | \# mos = | 0.00 | \$0 |  |  |
| $)$ | \# of staff $=$ | 0.0 |  |  |  |  |  |  | SUB-TO | OTAL Salary= |  | \$0 | \% effort = | 0.000\% |  | \$0 | \% effort = | 0.000\% | \$0 |  |  |
| 1 |  |  |  |  |  |  |  |  |  | ERE |  | \$0 |  |  |  | \$0 |  |  | \$0 |  |  |
| 2 |  |  |  |  |  |  |  |  |  |  |  |  | LOE = | 0.00 |  |  | LOE = | 0.00 |  |  |  |
| 3 |  |  |  |  |  |  |  |  | Total | Salary \& ERE |  | \$0 | \# of staff = | 0.0 |  | \$0 | \# of staff = | 0.0 | \$0 |  |  |
| $\begin{aligned} & 4 \bar{A} \\ & 5 \end{aligned}$ | Administrative Staff LOE Yr 1 = | 0.00 | FY Sala person mo |  |  |  | \$0 |  | 0.00 | 0.000\% |  | \$0 | \# mos = | 0.00 |  | \$0 | \# mos = | 0.00 | \$0 |  |  |
| 3 | \# of staff = | 0.0 |  |  |  |  |  |  | SUB-TO | OTAL Salary= |  | \$0 | \% effort = | 0.000\% |  | \$0 | \% effort = | 0.000\% | \$0 |  |  |
| 7 |  |  |  |  |  |  |  |  |  | ERE |  | \$0 |  |  |  | \$0 |  |  | \$0 |  |  |
| 3 |  |  |  |  |  |  |  |  |  |  |  |  | LOE = | 0.00 |  |  | LOE = | 0.00 |  |  |  |
| ${ }^{7}$ |  |  |  |  |  |  |  |  | Total | Salary \& ERE |  | \$0 | \# of staff = | 0.0 |  | \$0 | \# of staff = | 0.0 | \$0 |  |  |
|  | Sub-Total Staff Salaries |  |  |  |  |  |  |  |  |  | \$48,496 |  |  |  |  | \$49,951 |  |  | \$0 |  |  |

Step 2: Insert the copied cells on the next line down (here, row 52).


Step 3: Update the second Post Doctoral Associate information per budget figures.


Once an additional staff position line has been added, the Budget Summary (tab 1) will also need to be updated to include this addition. If using Cost Sharing and Cost Share Summary for this proposal, those tabs will also need to be updated.

Step 1: Copy the Post Doctoral Associate’s three-line block.


Step 2: Insert the copied cells on the next line down (here, row 28).


Step 3: Update the formula in column C to reference the second Post Doctoral Associate line from the Budget Worksheet (here, line 52). Cell will now autofill with position name as listed on the Budget Worksheet.


Step 4: Now update the person-months per year formulas. The Budget Worksheet cells to be referenced are those for LOE and \# of staff (here, found in cells B54 and B53 for Year One, J57 and J56 for Year Two, and M57 and M56 for Year Three.


Enter each of these respective cell numbers into its corresponding cell on the Budget Summary.


Step 5: Next update the formulas for the second Post Doctoral Associate’s Years 1-3 and Summary columns on the Budget Summary with the corresponding Sub-Total Salary line from the Worksheet (here, 54) - note that the column reference remains the same. [The Sub-Total Salary line is used as the ERE totals for each section are brought over separately to the Budget Summary.]


Update each of the respective cells on the Budget Summary with the corresponding line number.


## ADDING ADDITIONAL STUDENT LINES TO THE BUDGET WORKSHEET

If additional Graduate Research Assistant lines are required beyond those provided, contact RAHelp@asu.edu for an expanded version of the Budget Worksheet, as modification of multiple sections is required, including tuition remission.

Listing multiple student positions on one line when salary amounts are the same is an option that should be utilized when possible.
You can add additional Hourly Student lines by following the steps outlined above. Remember that the Budget Summary will need to be updated, and the Cost Share tabs, when being utilized. Additions must be inserted above the last Hourly Student line to be included in the equation range for the subtotals (here, line 104).


## ADDING ADDITIONAL SUBCONTRACTORS

Step 1: Copy the third Sub-Recipient row (here, 143). Note: by selecting other than the last sub-recipient line, the sum formula will automatically adjust the range to include the new addition).


Step 2: Insert the copied cells on the next line down (here, line 144).


Step 3: The F\&A calculation on total subrecipients must be manually updated to include the additional subrecipient row. Go to the F\&A Costs for Subs cell for Year 1 (here, H157). Copy the first segment of the formula, from just after the $=$ sign up to the + sign:


Step 4: Paste that copy at the front of the formula immediately following the $=$ sign and then update that segment to correspond to the row number of the additional subrecipient (here, 145):


Step 5: In Years 2 and 3, updating the F\&A Costs for Subs formula is slightly different. Note that the formula in each of these cells begins with "ROUND" and starts with the first subrecipient row number (here, 141):


Step 6: In the Year 2 cell, go to the top of the formula and copy the first full segment, from just after the $=$ sign up to the + sign:


Step 7: Go to the end of the formula, add a + sign, then paste in the copied segment:


Step 8: Now update that segment with the number of the additional subrecipient row (here, 145). Note there are six instances of "141" to be updated to " 145 " within the segment:


Step 9: Update the Year 3 cell in a similar fashion. However, note that in Year 3, the copied segment has nine instances of " 141 " to be updated:


Now that all three formulas have been updated to include the additional subrecipient row, the F\&A calculates correctly on the first $\$ 25,000$ of this total subaward that is budgeted at $\$ 10,000$ per year.


Once an additional Sub-Recipient line has been added, the Budget Summary (tab 1) will also need to be updated to include this addition.

Step 1: Copy the fourth Sub-Recipient's line.
Step 2: Insert it on the next line down. The formulas on this new line will automatically adjust to include the line number for the fifth Sub-Recipient from the Budget Worksheet.


No further change is necessary, as F\&A, Total, etc., are filling from the Budget Worksheet cells already updated for this addition.

