



Section 300: Proposal Development and Submission

OSR Policy 300.7 – Pro.1 — Estimating Salary

Corresponding with:

[OSR Policy 300.7](#)

[Direct Costs: Personnel](#)

Procedure Statement

Estimating a person's salary can be accomplished in several ways. Salary calculations can be based on a percentage of effort (Percent Effort Model) or the number of months of effort (Person Months Model) dedicated to the sponsored project. Guidelines for both are listed below.

Summer salary (normally considered three (3) months) is added compensation to 9-month employees. Therefore it is calculated separately. Some sponsors limit the effort allowed for summer salaries, thus it is very important to read the sponsor guidelines carefully.

Note: Calculations for salary do not include fringe benefits. They are calculated separately and should be identified in the proposed budget as a separate line item.

Forms/Instructions



[Research Administration Glossary at Carolina](#)

Annual Salary Estimations

I. Estimating Annual Salary using the Percent Effort Model in three basic steps.

1. First, determine an employee's FTE (Full-Time Equivalency) on a project:

Multiply the number of months of effort divided by the length of the employee appointment.

For example: 2 months of effort for an employee with a 9-month appointment equates to $2 \div 9$.

$$2 \div 9 = .222$$

The result (in this case, .222) is the FTE.

2. Multiply the FTE times 100 to determine the percentage of effort. For example:

$$.222 \times 100 = 22.2 \%$$



3. Multiply this percentage of effort (22.2% here) times the employees Institutional Base Salary. For example, if this is \$60,000 per year:

$$22.2\% \times \$60,000.00 = \$13,320.00$$

The resulting amount (here, \$13,320.00) is the proposed annual salary for the estimated time spent on the project.

II. Estimating Annual Salary using the Person Months Model.

1. First, determine the number of months of effort by multiplying the percentage of effort times the length of the employee appointment.

For example: 25% effort for an employee with a 12-month appointment would equate to $.25 \times 12$

$$.25 \times 12 = 3$$

The result (in this case, 3) is the number of months of effort

2. Along with the individual's Institutional Base Salary (for our example we will use \$70,000.00) you now have the information necessary to estimate the project salary. The entire equation is:

(Institutional Base Salary \div length of appointment) \times months of effort = estimated salary

- a. Divide the Institutional Base Salary by the length of the individual's appointment.

For example: $\$70,000 \div 12 = \$5,833.33$

- b. Then multiply that amount times the months of effort (here, 3):

$$\$5,833.33 \times 3 = \$17,499.00$$

The resulting amount (in this example, \$17,499.00) is the proposed annual salary for the estimated time spent on the project.

Summer Salary Estimations

I. Estimating Summer Salary using the Percent Effort Model in three basic steps.

1. First, determine an employee's FTE (Full-Time Equivalency) on a project:

Multiply the number of summer months of effort divided by the length of the employee appointment.

For example: 2 months of summer effort for an employee with a 9-month appointment would equate to $2 \div 9$.

$$2 \div 9 = .222$$

The result (in this case, .222) is the FTE.

2. Multiply the FTE times 100 to determine the percentage of effort. For example:



$$.222 \times 100 = 22.2 \%$$

3. Multiply this percentage of effort (22.2% here) times the employee's Institutional Base Salary. For example, if this is \$60,000 per year:

$$22.2\% \times \$60,000.00 = \$13,320.00$$

The resulting amount (here, \$13,320.00) is the proposed summer salary for the estimated time spent on the project.

II. Estimating Salary using the Person Months Model.

1. First, divide the Institutional Base Salary (here, \$75,500) by the length of appointment (in most cases, 9) to determine the monthly salary.

$$\text{For example: } \$75,500 \div 9 = \$8,388.88$$

The result is one month of salary, which would be applicable for each summer month of effort.

2. Next, multiply the number of summer months of effort times the one month of summer salary:

For example: The employee will dedicate two (2) summer months of effort to the project. The monthly salary has already been determined as \$8,388.88. Thus:

$$2 \times \$8,388.88 = \$16,777.76 \text{ (the total proposed summer salary)}$$

The resulting amount (here, \$16,777.76) is the proposed salary for the estimated time spent on the project.

Projecting Annual Salary Increases

Once the proposed annual salary amount is calculated, apply the allowable annual salary increase rate (generally set by the sponsor) to reflect inflationary and/or legislative increases in future years (commonly known as the Escalated Institutional Base Salary).

For example, if the annual projected salary of the project has been estimated at \$13,320 for the first year and a 3% increase is anticipated each year, the salary calculations for a 5-year project would be calculated as follows (rounded to the nearest dollar amount):

Year 1	Year 2	Year 3	Year 4	Year 5
\$13,320	\$13,320 x 1.03 = \$13,719	\$13,719 x 1.03 = \$14,131	\$14,131 x 1.03 = \$14,555	\$14,555 x 1.03 = \$14,992

Revision History

Prior Revisions:

The policies in the *Office of Sponsored Research Policies & Procedures Manual* supersede any OSR policies, procedures and appendices previously included in the *University Business Manual*, a publication of UNC Chapel Hill's [Division of Finance](#).

