Preparing a Cost Proposal Budget



Instructors



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Handouts

• Budget Instructions - ONR FOA Announcement N00014-23-R-F005:

https://research.ucdavis.edu/budget-instructions-onr-foa-announcement-n00014-23-r-fo05/



Learning Objectives



- 1. Know the definition of a Cost Proposal
- 2. Understand how to identify the necessary/allowed:
 - Components/Categories
 - Cost Basis/Costing Methods
 - Supporting Materials
- Know how to use some common Cost Basis/Costing Methods

Outline

- 1. Cost Proposal Definition
- 2. Prepare for Budget Development
- 3. Develop the Budget





Cost Proposal Definition

Some funding opportunity announcements request **two proposals:**

- Technical proposal on project details
- Cost proposal on finances

Objective of a cost proposal:

 To provide sufficient cost information to substantiate that the proposed cost is realistic, reasonable and complete for the proposed work.

Examples of organizations that request cost proposals:

- Federal agencies
 - Department of Defense (DoD)
 - Department of Energy (DoE)
 - United States Agency for International Development (USAID)
 - <u>Contracts</u> from Federal agencies (NIH, EPA, etc.)
- State agencies
 - CA Dept of Education
 - CA Dept of Public Health
- Private organizations
 - Patient Centered Outcomes Research Institute (PCORI)
 - Gulf of Mexico Research Initiative

Cost Proposal Definition

The cost proposal **supplements** and **must be consistent** with the **technical proposal**.

Elements of a cost proposal:

- Detailed description and explanation of project costs by:
 - Budget Period/Year
 - May have non-standard and/or varying budget periods
 - Project Task, or
 - Fiscal Year
- Basis of all costs
 - Costing methods and calculations
 - Escalations
- Supporting materials
- Budget table
- Budget Justification

B. Travel [\$xxx,xxx total travel]

[Example - adjust description based on current rates and trip details]

Basis of Cost

Travel is based on UC Davis policies and guidelines and federal regulations for reimbursement. Estimated travel costs are calculated using the following rates by category of expense:

Mileage: 53.5 cents per mile based on the IRS reimbursement rate for 2017. Please see attached mileage memo.

Airfare: Based on estimated actual cost; airline rates are checked via the web and the university's discount travel service to determine the approximate pricing for travel.

Hotel: Domestic - Based on actual, reasonable costs; Foreign - up to max federal per diem.

Meals and Incidentals: Actual Meals and Incidental Expenses (M&IE) must be claimed for domestic trips less than 30 days, up to and not exceeding the max allowance. Federal per diem is allowed for all foreign travel and local travel exceeding 30 days. Alcohol is not an allowable reimbursement on state or federal funds. The incidentals component is intended to reimburse the traveler for low value fees and tips given to waiters/waitresses, porters, baggage carriers, bellhops, hotel maids, etc.

Per Diem Meals: Per diem is authorized for all OCONUS travel and CONUS travel assignments exceeding 30 days. UC Davis adheres to the U.S. Department of State's per diem allowances. The rates listed on the federal per diem tables are the maximum that can be authorized for meals. Receipts are not required when claiming per diem.

Summary of Travel by Task

Summary or	Summary of Fraver by Task							
Task#	Period 1	Period 2	Period 3	Period 4	Period 5	Total		
Task 1.0	\$	\$	\$	\$	\$	\$		
Task 2.0	\$	\$	\$	\$	\$	\$		
Task 3.0	\$	\$	\$	\$	\$	\$		
Task 4.0	\$	\$	\$	\$	\$	\$		
Task 5.0	\$	\$	\$	\$	\$	\$		
Task 6.0	\$	\$	\$	\$	\$	\$		
Task 7.0	\$	\$	\$	\$	\$	\$		

Cost Proposal Components

Some or all of these components may be required.

Summary Budget Tables Detailed Budgets Cover Page (by organization) Summary by Project Period Cost Category Summary by Major Tasks Cost Basis • Summary by Task and Month **Table of Contents** Budget Tables Justification **Funding Breakdown Cost Sharing and Institutional Cost Proposals require more financial** Support **detail** than typical proposals. Direct Cost Categories by • If applicable Task They generally **do not have page** Costing Methods **Attachments limits** so add as much information as possible to explain how costs were Supporting Materials

derived.

Summary Budget Tables

While OR Budget Templates can satisfy the detailed budget component, you may be required to create your own Summary Budget Table(s).

Here are some examples.

Direct Cost Labor Summary

Task#	Period 1	Period 2	Period 3	Period 4	Period 5	Total
Task 1.0	\$	\$	\$	\$	\$	\$
Task 2.0	\$	\$	\$	\$	\$	\$
Task 3.0	S	\$	\$	\$	\$	\$
Task 4.0	\$	\$	\$	\$	\$	\$
Task 5.0	\$	\$	\$	\$	\$	\$
Task 6.0	\$	\$	\$	\$	\$	\$
Task 7.0	\$	\$	\$	\$	\$	\$

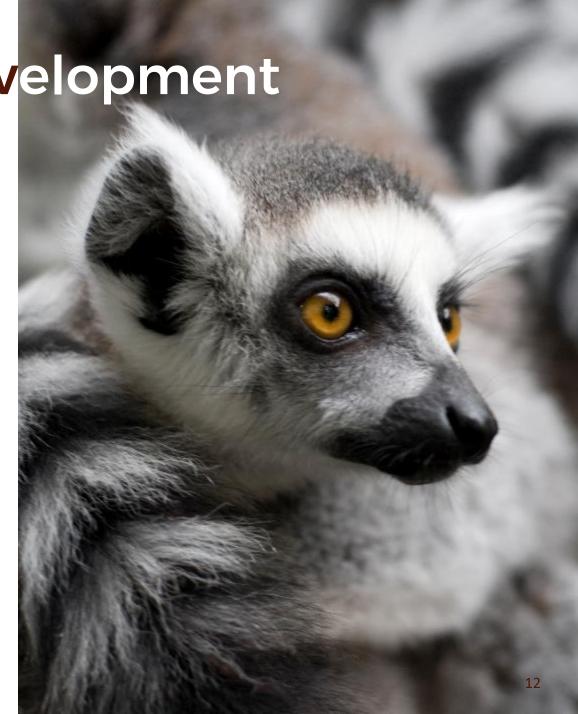
Additional examples are shown later.

Budget Summary by	10/1/18-	10/1/19-	07/1/20-	
Project Period	09/30/19	06/30/20	06/30/21	
	Period 1	Period 2	Period 3	
Personnel Costs				
Equipment				
Travel				
Consultant Costs				
Materials				
Subaward Costs				
[UCD only]				
Other Expenses				
Total Direct Costs				
Indirect Costs				
Total Costs	\$	s	s	
Summary by Organization	Period 1 \$	Period 2 \$	Period 3 \$	
UC Davis				
Partner 1				
Partner II				
Totals:	s	S	S	



Prepare for Budget Development

- 1. Read all sponsor guidelines
- Know the **UC Davis offices** that may need to be involved
- 3. Use the <u>OR Budget Templates</u>.
 - For cost proposals, you sometimes have to budget by task. If so, use the **Multi-Budget Template (C)** with a tab for each task.
- 4. Become familiar with **costing methods and supporting materials**

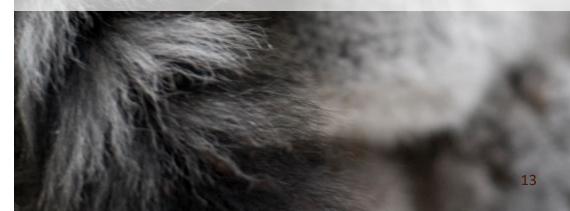


Prepare for Budget Development

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Closely read all guidelines

- Sponsors may have multiple sets of guidelines
 - Program solicitation (e.g., RFA, RFP, BAA)
 - Program FAQs
 - Sponsor overall guidelines
- Language may:
 - Include terms and conditions that need UC approval
 - Notify SPO early
 - Be vague



Prepare for Budget Development

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- 2. Know the **UC Davis offices** that may need to be involved
- 3. Use the OR Budget Templates.
 - For cost proposals, you sometimes have to budget by task. If so, use the **Multi-Budget Template (C)** with a tab for each task.
- 4. Become familiar with **costing methods and supporting materials**

One or more of these offices may be involved:

SPO

- Extramural proposals and awards
- Non-Disclosure Agreements

Business & Revenue Contracts

- Purchase Agreements
- Service Agreements

<u>InnovationAccess</u>

- Non-Disclosure Agreements related to Commercialization Plans
- Confidentiality Agreements

Equipment Management

- Equipment
- Fabrication

Interdisciplinary Research Support

- Research Development Support
- Large (center-scale) Proposal Coordination

Common Costing Methods and Supporting Materials

Labor/Salaries

- Costing Methods
 - Effort or labor hours
 - May allow escalations
- Supporting Materials
 - <u>Investigator Effort Commitment</u>
 - Academic Salary Scales
 - <u>Staff Salary Scales</u>

Subawards

- May be allowed to submit "sealed" bids directly to sponsor
 - Notify SPO early
- Subject to same requirements as Prime

Fringe Benefits

- Costing Methods
 - UC Davis Composite Benefit (CBR) Rates
 - May allow escalations
- Supporting Materials
 - CBR Table

Equipment

- Costing Methods
 - Indirect cost treatment
 - Quotes from vendors, etc.
 - Don't forget maintenance!
- Supporting Materials
 - Quotes
 - Service/Maintenance Contracts, if allowed

Common Costing Methods and Supporting Materials

Travel

- Costing Methods
 - Historical estimates
 - Per diem rates
 - Quotes
- Supporting Materials
 - Past trip information
 - Per diem rate agreements
 - Quotes

Materials & Supplies

- Costing Methods
 - Quotes or prices from catalogs
 - Historical estimates
- Supporting Materials
 - PDF of catalog prices
 - Expenditures from similar projects

Other common Supporting Materials

- Small Business Plan (sometimes called a "subcontracting plan")
 - Must be reviewed by Business Contracts
- Organizational Conflict of Interest
 - PI Certification is required. Contact SPO early
- Past Performance
 - SPO will work with you to identify sources of information on past performance on other grants and contracts at UC Davis
- Graduate Student Researcher (GSR) Tuition and Fees





Professor Charlene "Charlie" Apple has asked you to help prepare a **Cost Proposal Budget** for her proposal to the U.S. Department of Defense's (DoD) Multidisciplinary Research Program of the University Research Initiative.

Read the **Budget Instructions** excerpted from *ONR FOA Announcement N00014-23-R-F005* to begin gathering key information.

- L. What is the required project start date? June 1, 2023
- What is the required total project period, not including option years?3 years
- How long should each budget period/year be?12 months

- Per the budget instructions, what are the **allowed cost categories**?
 - Direct Labor
 - 2. Administrative and Clerical Labor 7. Materials and Supplies

 - 4. Travel
 - 5. Subawards/Subcontracts

- 6. Consultants
- Fringe Benefits and Indirect Costs 8. Recipient Acquired Equipment or Facilities
 - 9. Other Direct Costs
 - 10. Fee Profit
- 5. Professor Apple has informed you that her budget will only include:
- Remember these. Screenshot or write down
- Her salary and fringe benefits
- Purchase of a computer and software
- Travel to and attendance at a (project related) professional conference
- Indirect costs

Which cost categories should we therefore include in Professor Apple's budget?

- Direct Labor
- 2. Fringe Benefits and Indirect Costs
- 4. Travel
- 7. Materials and Supplies <u>or</u> 8. Recipient Acquired Equipment or Facilities

Equipment is capitalized and excluded from F&A if:

- Non-expendable
- Standalone
- Normal useful life is 1 year or more
- Cost is more than \$5,000

Software:

- A non-renewing (perpetual) software whose purchase price is \$5,000 or more per copy. Standalone item, not tied to an asset.
- A non-renewing (perpetual) software license of any amount which is Included as part of the cost of capital equipment.



From the budget instructions:

Direct Labor – Individual labor categories or persons, with associated labor hours and unburdened direct labor rates. Provide any escalation rates for out years.

Note: For "direct labor rates," some sponsors require an hourly rate. If you have to do this, add a note that explains you are doing so for illustrative or proposal purposes only, but that university investigators are not paid by the hour.

- 6. What Costing Method(s) should we use?
 - Effort or labor hours (portion of PI salary)
- 7. What Supporting Materials should we provide?
 - Academic Salary Scales
 - <u>UC Davis policy on investigator effort</u>

From the budget instructions:

Fringe Benefits and Indirect Costs (F&A, Overhead, etc.) – The proposal should show the rates and calculation of the costs for each rate category. If the rates have been approved/negotiated by a Government agency, provide a copy of the memorandum/agreement. If the rates have not been approved/negotiated, provide sufficient detail to enable a determination of allowability, allocability and reasonableness of the allocation bases, and how the rates are calculated. Additional information may be requested, if needed. If composite rates are used, provide the calculations used in deriving the composite rates.

- 8. What cost(s) from Professor Apple's budget should be reflected here?

 Fringe benefits related to Professor Apple's effort, and indirect costs for the project.
- 9. What costing method(s) and supporting materials should we provide?

<u>UC Davis Composite Benefit Rate policy</u> and <u>table</u>, and UC Davis' <u>Federally Negotiated</u> Indirect Cost Rate Agreement (NICRA).

From the budget instructions:

Materials & Supplies – Provide an itemized list of all proposed materials and supplies including quantities, unit prices, and the basis for the estimate (e.g., quotes, prior purchases, catalog price lists).

10. What cost(s) from Professor Apple's budget should be reflected here?

Computer and software

- 11. What costing method(s) and supporting materials/information should we provide?
 - Quotes, prior purchases, catalog price lists, etc.
 - Itemized list of all materials and supplies (including the quantities, unit prices, etc).
 - Basis of the estimate/cost basis



From the budget instructions:

Travel – The proposed travel cost should include the following for each trip: the purpose of the trip, origin and destination if known, approximate duration, the number of travelers, and the estimated cost per trip must be justified based on the organizations historical average cost per trip or other reasonable basis for estimation. Such estimates and the resultant costs claimed must conform to the applicable Federal cost principals.

12. What cost from Professor Apple's budget should be reflected here?

Professor Apple's attendance at a (project-related) professional conference.

- 13. What details must be included for each trip?
 - 1. Purpose

- 4. Number of travelers
- 2. Origin and destination, if known
- 5. Estimated cost

3. Approximate duration

- 6. Justification
- 14. What costing method(s) and supporting materials should we provide?
 - Historical average cost per trip or other reasonable basis such as:
 - Per diem rates
 - Historical averages from similar projects



Let's Practice - Direct Labor Costs

Professor Apple's Salary

- Professor Apple, who has a 12-month appointment, will commit 3% annual effort in each of the three budget periods. Her annualized salary is \$133,333.
- Include a 3% escalation in Year 2 and then again in Year 3.
- She will spend 40% of her effort for this project on Task 1 and 60% on Task 2 in each Budget Year/Period.

<u>Professor Apple's Fringe Benefits</u>

• Salary to charge x Fringe Benefit Rate

Calculate the salary to charge to the grant in each **Budget Period**.

- 1. Calculate salary for the first budget year.
- 2. Calculate salary for subsequent years.
 - Escalate by Project Year/Budget Period.

\$133,333 X 0.03 (3%) = \$4,000 \$4,000 X 1.03 = \$4,120 \$4,120 X 1.03 = \$4,244

Round up to the nearest dollar.

Let's Practice - Direct Labor Costs

Professor Apple's Salary

- Professor Apple, who has a 12-month appointment, will commit 3% annual effort in each of the three budget periods. Her annualized salary is \$133,333.
- Year 1 effort: \$4,000. Include a 3% escalation in Year 2 (\$4,120) and then again in Year 3 (\$4,244).
- She will spend 40% of her effort for this project on Task 1 and 60% on Task 2 in each Budget Year/Period.

Professor Apple's Fringe Benefits

Salary to charge x Fringe Benefit Rate

Calculate the salary to charge to the grant <u>for</u> each Task in each Budget Period.

- 1. Calculate salary for tasks in the first budget year.
- 2. Calculate salary for tasks in subsequent years.

Round up to the nearest dollar.

\$4,000	X	0.4 (40%)	=	\$1,600
\$4,000	X	0.6 (60%)	=	\$2,400
\$4,120	X	0.4 (40%)	=	\$1,648
\$4,120	X	0.6 (60%)	=	\$2,472
\$4,244	X	0.4 (40%)	=	\$1,698
\$4,244	X	0.6 (60%)	=	\$2,546

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Direct Labor Summary

These are examples of how you might enter the direct labor figures in a **summary budget table**:

Personnel	Annual Salary	Period 1	Period 2	Period 3
Charlie Apple, PI	\$133,333	\$4,000	\$4,120	\$4,244



		Annual	Salary Request			
		Salary	Period 1	Period 2	Period 3	Total
Task 1.0	Apple	\$133,333	\$1,600	\$1,648	\$1,698	\$ 4,946
Task 2.0	Apple	\$133,333	\$2,400	\$2,472	\$2,546	\$ 7,418
Total			\$4,000	\$4,120	\$4,244	\$12,364

Let's Practice - Direct Labor Summary

For cost proposal budgets: to determine fringe benefits, SPO recommends you use the Negotiated Indirect Cost Rate Agreement (NICRA) rates rather than the more commonly used Composite Benefit Rates table.

You can either use OR Budget Template A or a calculator to apply the NICRA rates to complete the summary budget table for fringe benefits.

In <u>OR Budget</u>
<u>Template A</u>, change cell U34 ("Escalations to fringe?") from "Yes" to "NICRA."

Rate Group (Code)	Period 1: 6/1/23 – 5/31/24	Period 2: 6/1/24 – 5/31/25	Period 3: 6/1/25 – 5/31/26
Faculty, Other Academic Appointments, MSP,	20 10/	20 10/	20.10/
Fire and Police (C) ["UCD (B)" in NICRA]	38.1%	38.1%	38.1%

Determine the fringe figures below.

Personnel Rate Fringe Benefits Group			Fringe Request			
Tringe benefits		Period 1 Period 2		Period 3	Total	
Task 1.0	Apple	С	\$ 610	\$ 628	\$ 647	\$1,885
Task 2.0	Apple	С	\$ 914	\$ 942	\$ 970	\$2,826
Total			\$1,524	\$1,570	\$1,617	\$4,711

Let's Practice - Travel

As you may recall, Professor Apple will attend one professional conference. This trip, related to Task 2 only, will occur in Budget Period 3.

Based on Professor Apple's expenses for the same conference **last year**, and pricing out airfare and hotels stays for the anticipated travel periods, you determine the following:

- Roundtrip airfare to San Diego: \$300
 - Attach airfare quotes from AggieTravel
- Hotel stay per night: \$150
 - She will stay approximate 3 nights $($150 \times 3 = $450)$
 - Attach quotes from hotel website or Conexus

How would you enter this info in the summary table?

- Taxi
 - \$15 each way; she will take a taxi to and from the airport (\$15 x 2 = \$30)
 - Attach previous expense/receipts
- No costs for meals and incidentals is expected as the conference provides all meals and she carries her own luggage, etc.

Task #	Period 1	Period 2	Period 3	Total
Task 1.0	\$0	\$0	\$0	\$0
Task 2.0	\$0	\$0	\$780	\$780

Travel Table - Itemized

Here's another way you could summarize the travel info:

Itemized Trip 1				
Period and Purpose	Destination	Item	Rate	Cost
Period 3: Experimental Biology Conference Meeting [Task 2]	San Diego, California	Airfare	\$300/Flight 1 traveler	\$300
		Hotel	\$150/night 3 nights 1 traveler	\$450
		Taxi	\$15 per trip x 2 (to/from airport)	\$ 30
			Total Cost for Trip	\$780

Let's Practice - Materials and Supplies

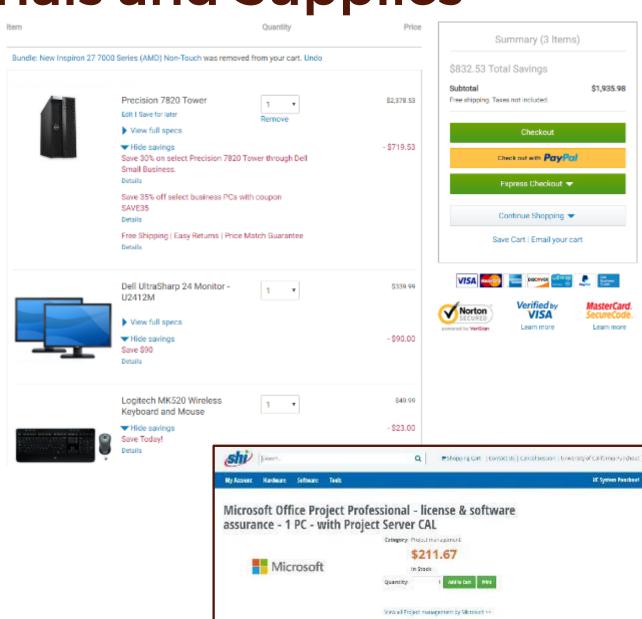
Professor Apple will purchase a computer and Microsoft Office Project Professional (License & Software) in the first Budget Period to be used equally for Tasks 1 and 2.

Computer/Workstation

- Cost Basis: working with your IT department, you obtain a \$1,935.98 quote for the needed workstation/computer
- Supporting Materials: Quote

Software

- Cost Basis: \$211.67 (one-time charge) quote from SHI (link through Aggie Buy) for license and software
- Supporting Materials: Quote



Let's Practice - Materials and Supplies

Professor Apple will purchase a computer and Microsoft Office Project Professional (License & Software) in the first Budget Period to be used equally for Tasks 1 and 2.

Computer/Workstation

- **Cost Basis:** working with your IT department, you obtain a \$1,935.98 quote for the needed workstation/computer
- Supporting Materials: Quote

Software

- Cost Basis: \$211.67 (one-time charge) quote from SHI (link through Aggie Buy) for license and software
- Supporting Materials: Quote

What is the total cost of Materials and Supplies for:

• Period 1: \$2,148

• Period 2: \$ 0

• Period 3: \$ 0

• Total: \$2,148

 How would you enter this in the summary table below?

Task #	Period 1	Period 2	Period 3	Total
Task 1.0	\$1,074	\$0	\$0	\$1,074
Task 2.0	\$1,074	\$0	\$0	\$1,074
Total	\$2,148	\$0	\$0	\$2,148

Materials and Supplies Table - Itemized

Here's another way you could summarize the travel info:

Itemized Materials ar	nd Supplies				
Item(s)	Qty.	Unit price	Basis for estimate	Task	Cost
Period 1:					
Computer	1	\$968	Online quote from Dell	1	\$968
Computer	1	\$968	Online quote from Dell	2	\$968
Software	1	\$106	Online quote from SHI	1	\$106
Software	1	\$106	Online quote from SHI	2	\$106
	Total	\$2,148			\$2,148

Let's Practice - Indirect Costs

Add the Direct Costs to get the **Total Direct Costs (TDC)**. In this case, the TDC is also the **Modified Total Direct Cost (MTDC)** base.

Category	Period 1		Period 2		Period 3		Total		
Salary	\$	4,000	\$	4,120	\$	4,244	\$	12,364	
Fringe Benefits	\$	1,524	\$	1,570	\$	1,617	\$	4,711	
Travel					\$	780	\$	780	
Materials & Supplies	\$	2,148					\$	2,148	
	TDC \$ 20,003								

- The <u>F&A rates</u> (on campus research) for this project increase each fiscal year and cause split rates.
- Use <u>OR Budget Template A</u> to help you determine the split rates.
 - Enter info on left side of table. Automatic calculations are made on right.
 - Project period: 6/1/23 5/31/26
 - Charlie Apple base: \$133,333. 3% effort (0.03) each year of project.
 - Don't forget to change "FY" (Fiscal Year) to "PY" (Project Year) in cell T4.
 - Select the appropriate CBR group for PI Apple, then "NICRA" in cell U34.



MTDC: Consists of all direct salaries and wages, applicable fringe benefits, materials and supplies, services, travel and up to the first \$25,000 of each subaward (regardless of the period of performance of the subawards under the award). MTDC excludes equipment, capital expenditures, charges for patient care, rental costs, tuition remission, scholarships and fellowships, participant support costs and the portion of each subaward in excess of \$25,000.

Let's Practice - Indirect Costs

Hopefully, your indirect cost figures and total project cost look like this:

Category	Period 1		Period 2		Period 3		Total				
Salary	\$	4,000	\$	4,120	\$	4,244	\$	12,364			
Fringe Benefits	\$	1,524	\$	1,570	\$	1,617	\$	4,711			
Travel					\$	780	\$	780			
Materials & Supplies	\$	2,148					\$	2,148			
Total Direct Costs \$ 20,003											
Indirect Costs	\$	4,600	\$	3,466	\$	4,051	\$	12,117			
						Total Costs	\$	32,120			



Learning Objectives Recap



- 1. Know the definition of a Cost Proposal
- 2. Understand how to identify the necessary/allowed:
 - Components/Categories
 - Cost Basis/Costing Methods
 - Supporting Materials
- Know how to use some common Cost Basis/Costing Methods

Any Last Questions?

Contact Us

Let us know how we did:

https://ucdavis.co1.qualtrics.com/jfe/form/SV_4HhzAkhwupoqFTw



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Websites

- OR Budget Templates: https://docs.or.ucdavis.edu/spo/
- F&A (NICRA) and Fringe Benefit rates: https://research.ucdavis.edu/proposals-grants-contracts/helpful-links/indirect-cost-fringe-benefit-rates/#fa
- SPO Website: https://research.ucdavis.edu/proposals-grants-contracts/spo
 - SPO Training pages: https://research.ucdavis.edu/proposals-grants-contracts/spo/spo-training/
 - **Preparing a Proposal Budget Toolkit**: https://research.ucdavis.edu/wp-content/uploads/Preparing-a-Proposal-Budget-Toolkit.pdf
- Investigator Effort Commitment: https://financeandbusiness.ucdavis.edu/systems/effort-commitment
 - UC Davis policy on investigator effort: https://ucdavispolicy.ellucid.com/documents/view/435/active/
- Academic Salary Scales: https://www.ucop.edu/academic-personnel-programs/compensation/index.html
- Staff Salary Scales: https://hr.ucdavis.edu/departments/compensation/salary-scales
- Graduate Student Researcher (GSR) Tuition and Fees: https://financeandbusiness.ucdavis.edu/student-resources/tuition-fees
- Per diem rates: https://supplychain.ucdavis.edu/travel-entertainment/travel/meals

Websites

- AggieBuy: https://supplychain.ucdavis.edu/procure-contract/aggiebuy
- UC Travel & Entertainment: https://supplychain.ucdavis.edu/travel-entertainment
- CGA Website: https://financeandbusiness.ucdavis.edu/finance/contracts-grants-accounting
- Business & Revenue Contracts: https://supplychain.ucdavis.edu/procure-contract/biz-rev-contracts
- InnovationAccess: https://itc.ucdavis.edu/innovation-access/
- Equipment Management: https://financeandbusiness.ucdavis.edu/finance/equipment-management
- Interdisciplinary Research Support: https://research.ucdavis.edu/offices/irs/

