



SOCIETY OF
RESEARCH
ADMINISTRATORS
INTERNATIONAL

Mastering Budgeting, Forecasting, & Cost Principles for Research Administrators

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Welcome & Session Overview

Audience Poll

Where are you in your
career journey?

- a) Less than 1 year
- b) 1–3 years
- c) 4–7 years
- d) 8–15 years
- e) More than 15 years

Session Overview

Why budgeting, forecasting, and cost principles matter in today's compliance environment

Increasing complexity of multi-year and incremental awards

Shared responsibility between RAs, PIs, departments, and central offices

Learning Objectives

Develop compliant, realistic research budgets aligned with sponsor and institutional requirements

Interpret and apply federal cost principles (Allowable, Allocable, Reasonable, Consistent)

Identify common budget pitfalls and implement proactive monitoring strategies

Audience Poll

Which part of budgeting
do you find most
challenging?

- Budget development
- Forecasting & projections
- Applying cost principles
- Communicating with PIs

Budgeting Foundations

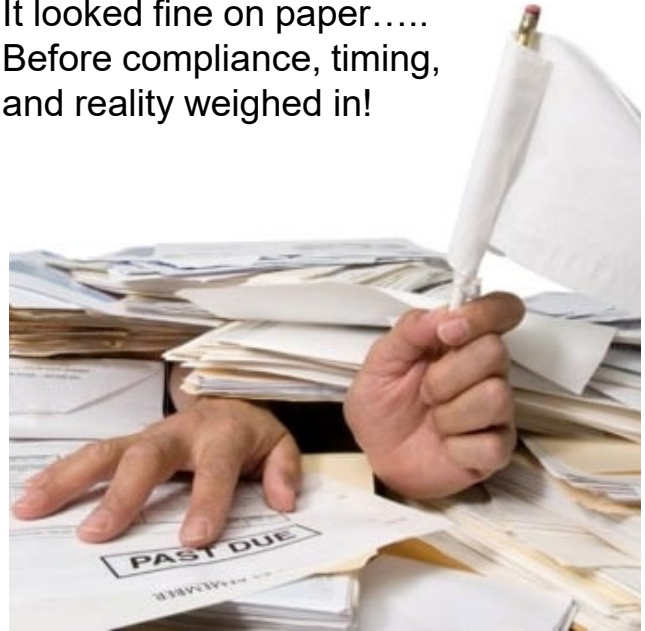
Building Realistic Budgets

Aligning scope of work to dollar amount.

Accounting for:

- Escalation
- Incremental funding
- Spend timing vs. budget period
- Common disconnects between proposal and post-award reality

It looked fine on paper.....
Before compliance, timing,
and reality weighed in!



Key budget components

- Personnel & fringe
- Non-personnel direct costs
- Facilities & Administrative (F&A) costs
- If applicable, direct costs exempted from F&A charges
- Subawards
- Sponsor vs. institutional constraints

Cost Principles Refresher

Applying Federal Cost Principles in Practice

Cost Principles Overview (2 CFR 200)

Applying Federal Cost Principles in Practice



A-A-R-C

- Allowable
- Allocable
- Reasonable
- Consistent

Cost Principles - Applying AARC

- Identifying red flags early
- Translating PI intent into compliant budgets
- Setting expectations for future forecasting

“Just because you can, doesn’t mean you should.”

MINI QUIZ — COST PRINCIPLES (AARC)

Testing the concept of: ***“Just Because You Can... Doesn't Mean You Should”***

Question 1 — Allowable vs. Allocable

Scenario:

A lab supply is generally allowable under sponsor rules. It is charged entirely to one award, even though it benefits two active projects.

Question:

This cost is compliant because it is allowable.

True or False: _____

Question 1 — Allowable vs. Allocable

Scenario:

A lab supply is generally allowable under sponsor rules. It is charged entirely to one award, even though it benefits two active projects.

Question:

This cost is compliant because it is allowable.

True or False: **FALSE**

Question 2 — Reasonableness

Scenario:

A PI requests a \$4,000 laptop to manage project data. The institution's standard laptop cost is \$1,800.

Question:

Is this cost **reasonable**?

Answer Options:

A) Yes, if the sponsor allows equipment; B) Yes, if the PI prefers it; C) Maybe — depends on justification and need

Question 2 — Reasonableness

Scenario:

A PI requests a \$4,000 laptop to manage project data. The institution's standard laptop cost is \$1,800.

Question:

Is this cost **reasonable**?

Answer Options:

A) Yes, if the sponsor allows equipment; B) Yes, if the PI prefers it; **C) Maybe — depends on justification and need**

Question 3 — Consistency

Scenario:

Administrative support is normally treated as indirect at your institution. A PI wants to charge an admin assistant directly to their award.

Question:

True or False: This is acceptable if the PI has available funds.

Answer: _____

Question 3 — Consistency

Scenario:

Administrative support is normally treated as indirect at your institution. A PI wants to charge an admin assistant directly to their award.

Question:

True or False: This is acceptable if the PI has available funds.

Answer: **FALSE**

Question 4 — Equipment & Scope

Scenario:

Mid-award, a PI requests specialized equipment not included in the original proposal but related to the project's aims.

Question:

Which cost principle is **most at risk**?

Answer Options:

A) Allowable B) Allocable C) Reasonable D) Consistent

Question 4 — Equipment & Scope

Scenario:

Mid-award, a PI requests specialized equipment not included in the original proposal but related to the project's aims.

Question:

Which cost principle is **most at risk**?

Answer Options:

A) Allowable B) **Allocable** C) Reasonable D) Consistent

Question 5

Scenario:

A cost appears to be **allowable, allocable, reasonable, and treated consistently** under federal cost principles.

Question:

True or False: That means the cost can be charged to the award without checking sponsor terms or institutional policy.

Answer: _____

Question 5

Scenario:

A cost appears to be **allowable, allocable, reasonable, and treated consistently** under federal cost principles.

Question:

True or False: That means the cost can be charged to the award without checking sponsor terms or institutional policy.

Answer: FALSE

Forecasting Techniques

Why Forecasting Matters

Prevents over- and under-spending

Supports PI decision-making

Critical for:

1. Incremental funding
2. No-cost extensions
3. Closeout readiness (last 120 days)
4. Financial Reporting to sponsor

Core Forecasting Tools

Forecast Runway

Spend trend review/Indirect cost spend trend

Commitment tracking (subawards/large outstanding POs and independent consultant agreements, etc)

Remaining balance projections

Forecasting in Action

Translating budget → actuals → forecast

Adjusting for:

1. Delayed hires
2. Supply timing
3. Indirect cost exemption changes

Sample budgeting/forecasting tool

Expenditure Category	Allocations	Pending Budget Allocations	Commitments (F&A included on ledger report)	Expenses	Balance YTD	Pending Ledger Adjustments (See Below)	Adjusted Balance (to date)	Projected exp / Encumbrances (See below)	Projected Balance	Var % (percentage of funds remaining)	Comments
01 - Salaries and Wages	\$111,296.00		\$0.00	(\$90,908.89)	\$30,387.11	\$0.00	\$30,387.11	(\$10,317.95)	\$20,069.16	16.5%	
02 - Fringe Benefits	\$5,863.00		\$0.00	(\$43,339.70)	(\$37,476.70)	\$0.00	(\$37,476.70)	(\$175.41)	(\$37,652.11)	-642.2%	
03 - Supplies / Services / Other Expenses	\$0.00		\$0.00	(\$1,900.00)	(\$1,900.00)		(\$1,900.00)	\$0.00	(\$1,900.00)	0.0%	
04 - Equipment and Facilities	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.0%	
05 - Contracts (Subrecipients)	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.0%	
06 - UC Multi-Campus Participation	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.0%	
07 - Travel	\$5,700.00		\$0.00	\$0.00	\$5,700.00		\$5,700.00	\$0.00	\$5,700.00	100.0%	
08 - Fellowship & Scholarships	\$82,701.00		\$0.00	(\$9,219.89)	\$73,481.11		\$73,481.11		\$73,481.11	88.9%	
Tuition/Fees adjustments	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00		(\$12,894.53)	(\$12,894.53)		
DIRECT COSTS	\$215,560.00	\$0.00	\$0.00	(\$145,368.48)	\$70,191.52	\$0.00	\$70,191.52	(\$23,387.88)	\$46,803.64	21.7%	
09 - Indirect Costs	\$84,399.00			(\$59,937.07)	\$24,461.93	\$0.00	\$24,461.93	(\$14,266.61)	\$10,195.32	12.1%	
PROJECT TOTAL	\$299,959.00	\$0.00	\$0.00	(\$205,305.55)	\$94,653.45	\$0.00	\$94,653.45	(\$37,654.49)	\$56,998.96	19.0%	

SALARY Projections (this section is for projecting future expenses)

Employee Name	Monthly Base	Distribution %	% Manual Entry from Payroll	Begin Date (overwrite if diff)	End Date (overwrite if diff)	# of Months	Projected Salary	Ret. Benefits Exp	Comments
	(blank)	0.00%		1/1/2026	(blank)	-	\$0.00	\$0.00	
	\$6,355.92	50.00%	1.70%	1/1/2026	3/31/2026	3.0	(\$10,317.95)	(\$175.41)	
	\$0.00	0.00%		10/1/2025	10/31/2025	1.0	\$0.00	\$0.00	
0	\$0.00	0.00%		4/1/2025	10/19/00	(1,524.9)	\$0.00	\$0.00	
0	\$0.00	0.00%		6/16/2025	10/19/00	(1,527.5)	\$0.00	\$0.00	
0	\$0.00	0.00%		6/16/2025	10/19/00	(1,527.5)	\$0.00	\$0.00	
0	\$0.00	0.00%		6/16/2025	10/19/00	(1,527.5)	\$0.00	\$0.00	
0	\$0.00	0.00%		10/19/00	10/19/00	-	\$0.00	\$0.00	
0	\$0.00	0.00%		10/19/00	10/19/00	-	\$0.00	\$0.00	
							(\$10,317.95)	(\$175.41)	

Tuition/Fees (with 25% buydown)

DESCRIPTION (No Buy-down on GSHIP)	Monthly Rate	# of months (remaining)	students "Note" "partial" student when	Quarter Totals	Comments (remember to note any split-funded s
Tuition (Fall 2025)	(1,231.18)	100%	0.0	\$0.00	
NRT (Fall 2025)	(2,557.63)	100%	0.0	\$0.00	
GSHIP (Fall 2025)	(888.00)	100%	0.0	\$0.00	
Tuition (Wntr 2026)	(1,732.18)	100%	0.0	\$0.00	
NRT (Wntr 2026)	(3,410.18)	100%	3.0	(\$10,230.53)	
GSHIP (Wntr 2026)	(888.00)	100%	3.0	(\$2,664.00)	
Tuition (Spr 2026)	(1,732.18)	100%	0.0	\$0.00	
NRT (Spr 2026)	(3,410.18)	100%	0.0	\$0.00	
GSHIP (Spr 2026)	(888.00)	100%	0.0	\$0.00	
				(\$12,894.53)	

Case Scenario: Managing Change in a Multi-Year NIH Award

Case Scenario: Six Months into the Award

Unplanned Changes Occur:

1. Postdoc resigns unexpectedly - Replacement will not start for **3 months**
2. Consumable supply costs increase **15%**
3. PI requests **\$10,000 capitalized equipment** (Not included in original budget)
4. Subaward invoices are **delayed/Outstanding POs**
5. PI wants to add a **new undergraduate assistant**

Focus Area 1: Budget Review

Questions to ask

- Which budget categories are immediately affected?
- Where do you see potential **surpluses vs. shortfalls**?
- What budget adjustments may be required?

Focus Area 1: Budget Review (Continued)

Considerations and Discussion

- Personnel savings vs. delayed spending
- Non-personnel cost escalation
- Equipment not originally approved
- Subaward timing vs. budget period

Focus Area 2 — Cost Principles (AARC)

Considerations and Discussion

Capitalized Equipment (\$10,000)

- Allowable?
- Allocable?
- Reasonable?
- Consistent with original scope?

Focus Area 2 — Cost Principles (AARC)

Considerations and Discussion

Undergraduate Assistant

- Allowable under sponsor & institutional policy?
- Allocable to this project?
- Reasonable for proposed duties?
- Consistent with similar roles?

Focus Area 3 — Forecasting Impact

Questions

- What is the financial impact of the 3-month postdoc gap?
- How does the 15% supply increase affect projections?
- How would you adjust the forecast today?

Focus Area 4 — Forecast Runway & Subaward Timing

Considerations and Discussion

How do delayed subaward invoices affect:

- Forecast runway calculations?
- Remaining balance projections?
- Indirect Costs

What risks arise if spending suddenly “catches up”?

Common Pitfalls & Best Practices

Common Budget & Forecasting Pitfalls

1. Using total costs balance as available funds to PI
2. Not revisiting projections after changes
3. Not accounting for the impacts of rebudgeting and indirect cost changes
4. Waiting too long to escalate concerns

Example indirect cost expenses being on track with projections – not out of balance.

***The award allows for rebudget (up to 25% of the total award rebudget into other categories) under FDP Prior Approval Matrix**

Expenditure Category	Allocations	Pending Budget Allocations	Commitments (F&A included on ledger report)	Expenses	Balance YTD	Pending Ledger Adjustments (See Below)	Adjusted Balance (to date)	Projected exp / Encumbrances (See below)	Projected Balance	Var % (percentage of funds remaining)
01- Salaries and Wages	\$146,770.00		\$0.00	\$0.00	\$146,770.00	\$0.00	\$146,770.00	(\$153,394.93)	(\$6,624.93)	-4.5%
02- Fringe Benefits	\$32,592.00		\$0.00	\$0.00	\$32,592.00	\$0.00	\$32,592.00	(\$37,966.08)	(\$5,374.08)	-16.5%
03 - Supplies / Services / Other Expenses	\$17,500.00		\$0.00	(\$7,500.00)	\$10,000.00		\$10,000.00	\$0.00	\$10,000.00	57.1%
04 - Equipment and Facilities	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.0%
05 - Contracts (Subrecipients)	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.0%
06 - UC Multi-Campus Participation	\$0.00		\$0.00	\$0.00	\$0.00		\$0.00	\$0.00	\$0.00	0.0%
07 - Travel	\$4,000.00		\$0.00	\$0.00	\$4,000.00		\$4,000.00	\$0.00	\$4,000.00	100.0%
08 - Fellowship & Scholarships	\$0.00		\$0.00	\$0.00	\$0.00		\$0.00	\$0.00	\$0.00	0.0%
Tuition/Fees adjustments	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.0%
DIRECT COSTS	\$200,862.00	\$0.00	\$0.00	(\$7,500.00)	\$193,362.00	\$0.00	\$193,362.00	(\$191,361.01)	\$2,000.99	1.0%
09 - Indirect Costs	\$122,526.00	\$0.00	\$0.00	(\$4,575.00)	\$117,951.00	\$0.00	\$117,951.00	(\$116,730.22)	\$1,220.78	1.0%
PROJECT TOTAL	\$323,388.00	\$0.00	\$0.00	(\$12,075.00)	\$311,313.00	\$0.00	\$311,313.00	(\$308,091.23)	\$3,221.77	1.0%

Adjusted Balance (to date)	Projected exp / Encumbrances (See below)	Projected Balance	Var % (percentage of funds remaining)
\$146,770.00	(\$153,394.93)	(\$6,624.93)	-4.5%
\$32,592.00	(\$37,966.08)	(\$5,374.08)	-16.5%
\$10,000.00	\$0.00	\$10,000.00	57.1%
\$0.00		\$0.00	0.0%
\$0.00	\$0.00	\$0.00	0.0%
\$0.00	\$0.00	\$0.00	0.0%
\$4,000.00	\$0.00	\$4,000.00	100.0%
\$0.00		\$0.00	0.0%
	\$0.00	\$0.00	
\$193,362.00	(\$191,361.01)	\$2,000.99	1.0%
\$117,951.00	(\$116,730.22)	\$1,220.78	1.0%
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Example indirect cost expenses are NOT on track with projections – out of balance.
 *The award allows for rebudget (up to 25% of the total award rebudget into other categories) under FDP Prior Approval Matrix

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02 - Fringe Benefits	\$5,863.00		\$0.00	(\$43,339.70)	(\$37,476.70)	\$0.00	(\$37,476.70)	(\$175.41)	(\$37,652.11)	-642.2%
03 - Supplies / Services / Other Expenses	\$0.00		\$0.00	(\$1,900.00)	(\$1,900.00)		(\$1,900.00)	\$0.00	(\$1,900.00)	0.0%
04 - Equipment and Facilities	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.0%
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07 - Travel	\$5,700.00		\$0.00	\$0.00	\$5,700.00		\$5,700.00	\$0.00	\$5,700.00	100.0%
08 - Fellowship & Scholarships	\$82,701.00		\$0.00	(\$9,219.89)	\$73,481.11		\$73,481.11	\$0.00	\$73,481.11	88.9%
Tuition/Fees adjustments	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00		(\$12,894.53)	(\$12,894.53)	
DIRECT COSTS	\$215,560.00	\$0.00	\$0.00	(\$145,368.48)	\$70,191.52	\$0.00	\$70,191.52	(\$23,387.88)	\$46,803.64	21.7%
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PROJECT TOTAL	\$299,959.00	\$0.00	\$0.00	(\$205,305.55)	\$94,653.45	\$0.00	\$94,653.45	(\$37,654.49)	\$56,998.96	19.0%

Adjusted Balance (to date)	Projected exp / Encumbrances (See below)	Projected Balance	Var % (percentage of funds remaining)
\$30,387.11	(\$10,317.95)	\$20,069.16	16.5%
(\$37,476.70)	(\$175.41)	(\$37,652.11)	-642.2%
(\$1,900.00)	\$0.00	(\$1,900.00)	0.0%
\$0.00		\$0.00	0.0%
\$0.00	\$0.00	\$0.00	0.0%
\$0.00	\$0.00	\$0.00	0.0%
\$5,700.00	\$0.00	\$5,700.00	100.0%
\$73,481.11		\$73,481.11	88.9%
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\$94,653.45	(\$37,654.49)	\$56,998.96	19.0%

Considerations

1. What is the concern?
2. How did we get here?
3. How do we fix it?
4. What should be done moving forward?

The Math

Adjusted Balance (to date)	Projected exp / Encumbrances (See below)	Projected Balance	Var % (percentage of funds remaining)
\$30,387.11	(\$10,317.95)	\$20,069.16	16.5%
(\$37,476.70)	(\$175.41)	(\$37,652.11)	-642.2%
(\$1,900.00)	\$0.00	(\$1,900.00)	0.0%
\$0.00		\$0.00	0.0%
\$0.00	\$0.00	\$0.00	0.0%
\$0.00	\$0.00	\$0.00	0.0%
\$5,700.00	\$0.00	\$5,700.00	100.0%
\$73,481.11		\$73,481.11	88.9%
	(\$12,894.53)	(\$12,894.53)	
\$70,191.52	(\$23,387.88)	\$46,803.64	21.7%
\$24,461.93	(\$14,266.61)	\$10,195.32	12.1%
\$94,653.45	(\$37,654.49)	\$56,998.96	19.0%

\$56,998.96 (Current TC) / 1.61 (1. indirect rate) = \$35,403.08 (new TDC): \$ 35,403.08

\$35,403.08 (New TDC) x 0.61 (indirect rate) = \$21,595.88 (new IDC*): \$ 21,595.88

\$35,403.08 (New TDC) + \$21,595.88 (new IDC) = \$56,998.96 (TC): \$ **56,998.96**

*assumes all TDCs are IDC eligible

Best Practices for Fiscal Stewardship

1. Regular forecast cadence
2. Clear documentation
3. Early PI communication
4. Using forecasts as decision tools, not just reports
5. Use of Federal Demonstration Partnership (FDP) Prior Approval Matrix –found by entering “FDP prior approval” in an online search engine.

Closing

Key Takeaways

1. Budgets set the plan
2. Cost principles guide decisions
3. Forecasting keeps awards on track
4. RAs are strategic partners, not just compliance enforcers

QUESTIONS?

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