

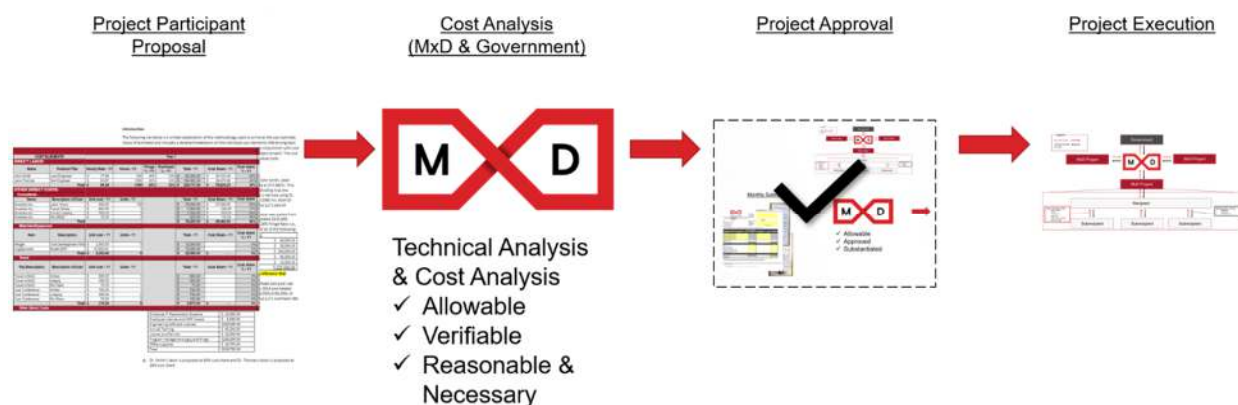
MxD PROPOSAL COST DEVELOPMENT GUIDE

I. BACKGROUND

MxD projects are governed by various Government and Federal regulations and are generally funded on a cost reimbursable basis. This guide is intended to assist the Proposal Team Lead with developing an MxD cost proposal generally as part of the response to a Request for Proposal. If the proposal is awarded, the Proposal Team Lead will be reimbursed for their costs incurred that are allowable, approved, and substantiated. To ensure that costs are allowable, verifiable, reasonable and necessary per 2 CFR 200 Subpart E, MxD conducts both a technical and cost analysis on every down selected proposal prior to submission to the Government for award. To conduct this analysis, MxD needs one detailed cost proposal and one cost narrative summarizing, or “rolling-up”, the costs for all Proposal Team members, including participants that only provide cost share.

II. PURPOSE

This guide is intended to assist the Proposal Team Lead and Proposal Team members in developing the costs that they propose such that they may be analyzed by MxD. By understanding what MxD’s Cost Analysis requires using the recommended source documentation, the Proposal Team Lead will help ensure that costs are sufficiently developed when proposed. The goal is that the MxD Cost Analysis will be conducted in a timely fashion with minimal requests for additional information, allowing efficient project submission and approval.



This guide covers the following:

- **Definitions**
- **Developing Cost**
- **Elements of Cost**
- **Certifications**
- **Populating the Template**

III. EXHIBITS

The following attachments are included in the Proposal Preparation Kit:

- Blank Cost Proposal Template (Excel document that identifies the costs)
- Blank Cost Narrative Template (Word document that describes the costs/substantiation)
- Example Project Cost Proposal
- Example Cost Narrative

IV. DEFINITIONS OF COST ELEMENTS

Allowable/Unallowable Costs

Most costs that are proposed and incurred, if properly substantiated (when required), are allowable. However, there are costs that are unallowable by the Government. These costs can be found in 2 CFR 200 Subpart E and include items like alcohol beverages, fines and penalties, lobbying, etc. These costs should be excluded from any proposal, billing, or claim on MxD projects. Any costs that are deemed unallowable to claim for Federal reimbursement are also unallowable to claim as cost share.

Verifiable Costs

The cost proposal should only include the costs that will be incurred to execute the proposal. No profit or fees can be included. For example, labor should be what the organization pays its individuals and not the rates charged in a standard commercial transaction. Conversely, when a commercial item is purchased from a vendor, there is no expectation that the organization would be able to identify and obtain the item from the vendor at cost. The amount that the organization pays the vendor is their cost and should be presented as such.

Reasonable and Necessary Costs

A cost is reasonable and necessary if, in its nature and amount, it is what a reasonable person would expect to incur and pay in the normal course of business executing a specific task. There is no presumption that any cost, no matter its nature and amount is reasonable. The Proposal Team Lead and MxD have the burden of proof to the Government that the costs are reasonable and necessary as proposed and incurred.

Materiality

All costs proposed by a Proposal Team Lead must be addressed and the substantiation made available on request. However, the amount and the level of substantiation should be commensurate with both the dollar value and nature of the cost. The Proposal Team Lead should coordinate and communicate with MxD when unsure of how to treat costs that appear immaterial.

V. DEVELOPING COSTS

The Proposal Team Lead must provide a Cost Narrative that describes their basis of estimate and describes the associated substantiation used to develop the proposed costs. A thoroughly substantiated and supported cost proposal will expedite the cost analysis process if the proposal is down selected and reduce the risk of requests for information from MxD and the Government. Additionally, the Proposal Team Lead must certify that proposed costs have been determined fair and reasonable.

Note: If a Proposal Team Lead has questions at any time during the preparation of a proposal about the process, the substantiation needed, or guidance of any sort, please do not hesitate to reach out to MxD at projects@mxdusa.org. Addressing more issues prior to submittal greatly reduces the number of follow-up questions and expedites the review by MxD and the USG (where applicable).

The following are some best practices to consider when developing costs:

- Cost Narrative should provide a description of the detailed methodology used to derive or calculate costs based on the supporting documentation
- Ensure the source used is current and relevant
- If using screenshots, save the full screen shot including address, date, and other information
- Invoices, quotes, estimates, etc. should be on official letterhead and signed
- If using spreadsheets or downloads out of a system, save screenshots out of the system showing totals, report names, dates, etc. that can be tied to the spreadsheet

Proprietary or Sensitive

In certain instances, the Proposal Team Lead or member may not wish to share sensitive or proprietary data with MxD. The Proposal Team Lead or member should notify MxD and coordinate submission directly to the Government when required. MxD will reach out to the Proposal Team Lead or member and the Government to confirm that the Government is in receipt of the substantiation.

Development/Substantiation Challenges

For items that the Proposal Team Lead has challenges supporting/substantiating, e.g., Table 1, the Proposal Team Lead should reach out and coordinate with MxD. Depending on the materiality of the items, MxD will work with the Proposal Team Lead to identify any alternative means developing the cost and/or alternative substantiation.

Sources of Cost / Substantiation Documentation

If the proposal is down selected, a cost analysis will be conducted by MxD; the Cost Analysis will require substantiating documents. The Proposal Team Lead needs to ensure that they base costs off readily accessible substantiating documentation.

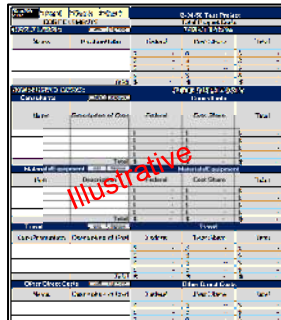
Table 1 below provides a matrix of cost elements, how to develop the elements of cost, and acceptable sources of information/substantiation to meet the cost element objectives. Note this is not an exhaustive list and there may be other forms of support that are acceptable. Please reach out to MxD if you have any questions on acceptable forms of support.

Table 1		
Element of cost	Objective	Recommended Sources of Cost Information/Substantiation
Direct Labor <ul style="list-style-type: none"> • Fringe • Overhead 	Develop the cost of direct labor and fringe proposed through Government approved, historical, average, or other data.	<ul style="list-style-type: none"> • Direct labor rate agreement with the Government • Existing invoice to a Government customer • Publicly available payroll data where current • Labor distribution reports • Payroll data <ul style="list-style-type: none"> • Identify annual hours worked • Support escalation factors over typical 3-5%
Travel	Develop the travel costs and identify any departures from Government published per diem rates	<ul style="list-style-type: none"> • JTR per diem rates and IRS mileage • https://www.defensetravel.dod.mil/Docs/perdiem/JTR.pdf • Vendor Quotes for airlines and hotels in excess of Government approved rates with justification • Internal travel policies
Consultants	Develop consultant costs, broken down by cost elements	<ul style="list-style-type: none"> • Verified previous rate history statement from Government (SF 1420) • Previously approved Government Customer Invoice • Comparable costs (GSA, etc.) • Certification supporting methodology and cost (least preferable)
Materials	Develop the cost to manufacture materials internally or to purchase them from an outside vendor	<ul style="list-style-type: none"> • Vendor quote • Invoice • Purchase history • Internal transfer pricing/Standard Cost
Other Direct Costs	Develop the other costs directly allocable to the project	<ul style="list-style-type: none"> • Vendor quote • Invoice • Purchase history • Policies identifying standard costs e.g. University tuition reimbursement rates or equipment use rates
Indirect Costs	Develop and allocate costs such as general and administrative or facilities and administrative costs to the specific project	<ul style="list-style-type: none"> • Forward Pricing Rate Agreement (FPRA) • Negotiated Indirect Rate Agreement (NICRA) • Forward Pricing Rate Recommendation (FPRR) • Default 10% de minimis rate allowed under 2 CFR 200 • Provide pools and bases that make up the indirect rates

VI. ELEMENTS OF COST

The Proposal Team Lead's cost proposal, to include all proposal team members, is required to be broken down into and analyzed by the following cost elements:

- Labor
 - Fringe
 - Direct
- Travel
- Consultants
- Materials/Equipment
- Other Direct Costs
- Indirect Costs



The image shows a screenshot of a complex spreadsheet used for cost proposal development. It features multiple tabs at the top, including 'Labor', 'Travel', 'Materials', 'Equipment', 'Other Direct Costs', and 'Indirect Costs'. The main area displays various data entry fields, formulas, and calculated totals for each category. A large red watermark with the word 'Illustrative' is overlaid diagonally across the center of the spreadsheet.

Labor

This is the actual cost of labor to the Proposal Team Lead or member to complete the project. This cost should be what the Proposal Team Lead or member pays its individuals and not the rates it would charge in a standard commercial transaction, i.e., not a billing rate.

Cost should be presented by individual/position at an hourly rate. If the Proposal Team Lead or member does not normally track these costs on an hourly basis and must calculate the hourly rate, the Proposal Team Lead or member should document and provide its methodology, e.g., \$100,000 annual salary divided by 2,080 hours in a standard work year to get an hourly rate of \$48.08/hr.

The labor cost must identify and support the percentage that is applicable to fringe benefits and overhead either as a separate percentage to be applied to the base rate or a verifiable percentage that is included in the rate.

The labor costs proposed must be discussed in detail in the cost narrative referencing source documentation used and any methodologies necessary to derive the cost.

Travel

These are estimated travel costs required to complete the project. Travel costs should be broken down by individual costs and trips (e.g. trip no. 1 airfare, trip no. 1 lodging). Support for estimated travel costs will be vendor quotes for airlines and hotels and Government published rates for mileage, Joint Travel Regulations (JTR) published per diem, etc. The cost analysis will look to verify that the costs presented support the number and duration of trips to include destinations and specific travelers. Refer to the "Unallowable" section for travel costs that are unallowable (e.g. the expectation is that airfare will be coach or economy class; upgrades are unallowable). The cost analysis will refer to JTR identified per diem rates for reference and reasonableness.

Consultants

These are costs associated with an individual or company that is retained to provide professional advice, goods or services on a project for a fee. Consultants:

- Provide the goods or services within normal business operations
- Provide similar goods or services to many different purchasers
- Provide goods or services that are ancillary to the operation of the research project
- Are generally not subject to monitoring or reporting requirements of the prime award

It is important to understand the distinction between subrecipients and consultant(s):

The clearest distinction is whether the Proposal Team Lead or member is buying goods or services or if they are outsourcing the responsibility for delivering the outcomes expected entirely. In the latter case, it is likely that the consultant(s) should really be considered a subrecipient(s).

Consultant costs should be broken out on a cost-by-cost element (i.e. labor categories, hours, travel and other direct costs). Rate should be the normal commercial rate they would charge the US Government. Cost narrative should reference the source of costs such as:

- Verified previous rate history statement (e.g. SF 1420)
- Previously approved invoice
- MxD service history
- Comparable rates (GSA, etc.)
- Quote
- MxD requires direct quotes for any consultant costs exceeding \$150,000.
- Certification (least desirable option)

Subrecipients	Consultants
Perform a significant portion of the scope of work; Collaborate in the project design/proposal development; Provide scope of work and budget as part of the proposal prep; Complete work promised and analyzes results found; Collaborates on design; Note: Facilities and Administrative (F&A) (similarly referred to as G&A on procurement contracts) costs apply only to the first \$25,000 of the sub-award.	Do not participate/collaborate in project design/proposal; Only perform specific services such as lab testing, report printing, etc.; Do not perform analysis or evaluation or exercise discretionary judgment; Note: F&A costs apply to entire figure, regardless of total. These fees are considered "other direct costs" on the budget.

Materials

This is the cost of the materials that are being proposed for the project. Materials can generally be broken down into two categories:

Prepared/manufactured in-house: These are standard manufacturing costs. Substantiation includes internal pricing documentation such as pricelists, internal chargeback documentation, internal quotes etc. or standard costing data.

Purchased from a commercial vendor: These are items purchased through a commercial vendor. Substantiation includes vendor invoices and quotes.

The purpose/use of the equipment must be explicitly explained in the cost narrative for MxD technical review. Equipment purchased with Federal funds or claimed as cost share can only be used for the purpose/use indicated and cannot be repurposed without explicit approval from the Government.

Given the broad range of items that fall in this category, participants also must specify the units of measure being used to describe the material. For example, a software license needs to be clearly identified by license type (monthly subscription duration, days, bytes, users etc.)

Any methodology used to derive a material cost should be documented and any price list or quote used in the methodology should be referenced in the cost narrative.

MxD requires direct quotes and proof of bid from a minimum of 3 suppliers for any material, equipment, or applicable other direct costs exceeding a unit price of \$5000 or total price of \$25,000.

Other Direct Costs (ODCs)

These are costs that are directly attributable to the project but do not necessarily fit any of the other cost elements. ODC cost should be supported through vendor quotes, price lists, any estimating procedures, policies etc. Any methodologies used to derive costs should be documented and any methodology should be documented in the cost narrative.

Indirect Costs

These are costs that are not typically attributable to a specific project and can include F&A and various overhead accounts. It is important that the Proposal Team Lead or member is clear on the buildup of the indirect rates and the pools used as well as specific on the base that the rates are applied to. Indirect rates can be referenced through:

- Forward Pricing Rate Agreement (FPRA)
- Negotiated Indirect Rate Agreement (NICRA)
- Forward Pricing Rate recommendation (FPRR)
- Indirect cost allocation pool(s) and base and the Proposal Team Lead or member's application of the costs

Certifications

Within the Cost Proposal Narrative, the Proposal Team Lead will include the following signed and dated certifications:

Unallowable costs:

[Insert Proposal Team Lead Name] (the “Proposal Team Lead”) has reviewed the cost proposal for proposal **[Insert Proposal Title]** (the “Proposal”) in accordance with 2 CFR 200 Subpart E and certifies that to the best of its knowledge there are no unallowable costs included with the proposal. Proposal Team Lead acknowledges that if unallowable costs are included, Proposal Team Lead will not be entitled to reimbursement of such costs.”

Profit/fee:

“Proposal Team Lead has reviewed the cost proposal for the Proposal and certifies that to the best of its knowledge the cost proposed do not include any profits, fees or proceeds to the Proposal Team Lead. Proposal Team Lead acknowledges that if profits, fees or proceeds to Proposal Team Lead are included, Proposal Team Lead will not be entitled to their reimbursement”

Cost source/substantiating/supporting documentation:

“Proposal Team Lead has developed the cost proposal for the Proposal using available readily accessible documentation as referenced in the cost proposal narrative. Proposal Team Lead acknowledges that documentation will be required when invoicing for reimbursement of costs incurred and that a lack of substantiating documentation may cause Proposal Team Lead to be denied reimbursement of costs incurred.”

[For each Proposal Team member] Cost Review:

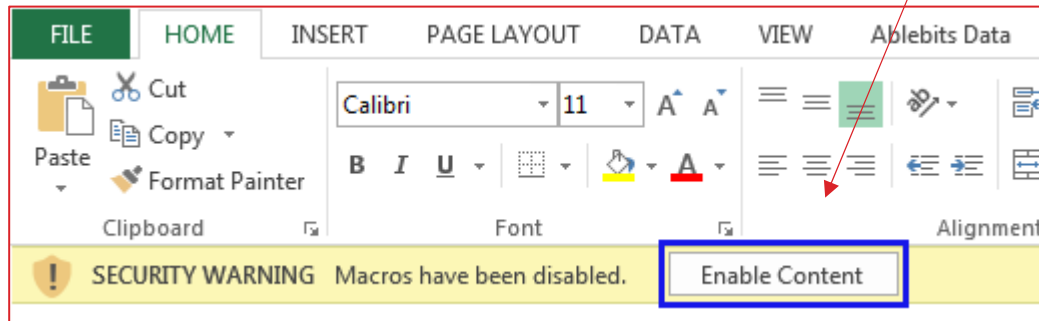
“Proposal Team Lead has reviewed the Proposal Team member’s cost proposal for **[Insert Organization Name]** and had made the determination that they have provided sufficient and complete cost detail. Based on the information made available to Proposal Team Lead, the proposed costs are allowable, verifiable, reasonable and necessary per 2 CFR 200 Subpart E, and the Cost Share to MxD cost allocation is appropriate for the effort. As a result of this analysis, Proposal Team Lead considers this proposal to be adequate as a basis for subaward.”

Authority:

“I acknowledge and agree that MxD will be relying on the foregoing certifications and I represent and warrant that I have the authority to make these certifications on behalf of the Proposal Team Lead.”

VII. POPULATING THE TEMPLATE

MxD has provided a template (Attachment 2a) to populate the proposed costs. This section provides specific details on using the template. Upon opening the template, the user should ensure that they click “Enable Content” to ensure that the built-in Macro functionality operates correctly.



The template currently consists of two worksheets:

Project Summary:

Contains the high-level details of the project including totals that populate from the Cost Detail worksheet.

Project Call Designation		Proposed Project Name:	
Project Information			
Recipient Name		Comments/Notes	
Subrecipient Name(s)			
Project StartDate			
Project End Date			
Project Duration			
Project Cost Information			
Project Cost	Federal / MxD	Cost Share	Total
Direct Labor	\$ -	\$ -	\$ -
Other Direct Costs	\$ -	\$ -	\$ -
Consultants	\$ -	\$ -	\$ -
Materials/Equipment	\$ -	\$ -	\$ -
Travel	\$ -	\$ -	\$ -
Other Direct Costs	\$ -	\$ -	\$ -
Subrecipients	\$ -	\$ -	\$ -
Indirect Costs	\$ -	\$ -	\$ -
Total	\$ -	\$ -	\$ -
Percentage	-	-	-
Project Points of Contact			
Principal Investigator		Administrative Contact	
Name:		Name:	
Title:		Title:	
Email:		Email:	
Phone:		Phone:	
Offeror Financial Information			
Recipient DUNS Number		Is Recipient compliant with 2 CFR 200 Section 302? If not, explain.	
Signature of an official authorized to obligate the institution contractually			
Print Name			
Title			
Date			

Enter project data into the white cells. Grey cells are locked and will carry the total over from the Cost Detail.

Ensure Project Summary is signed by an official authorized to obligate the institution contractually.

Cost Detail:

Contains the specific costs broken down by element of cost across the entire project.

Show/Hide Years		Year 1 Year 2 Year 3		COST ELEMENTS			Total Project Costs		
DIRECT LABOR:				DIRECT LABOR:					
Name	Position/Title	Federal/MxD	Cost Share	Total					
		\$ -	\$ -	\$ -					
		\$ -	\$ -	\$ -					
		\$ -	\$ -	\$ -					
		\$ -	\$ -	\$ -					
Total		\$ -	\$ -	\$ -					
OTHER DIRECT COSTS:				OTHER DIRECT COSTS:					
Consultants				Consultants					
Name	Description of Cost	Federal/MxD	Cost Share	Total					
		\$ -	\$ -	\$ -					
		\$ -	\$ -	\$ -					
		\$ -	\$ -	\$ -					
		\$ -	\$ -	\$ -					
Total		\$ -	\$ -	\$ -					
Materials/Equipment				Materials/Equipment					
Item	Description	Federal/MxD	Cost Share	Total					
		\$ -	\$ -	\$ -					
		\$ -	\$ -	\$ -					
		\$ -	\$ -	\$ -					
		\$ -	\$ -	\$ -					
Total		\$ -	\$ -	\$ -					
Travel				Travel					
Trip Description	Description of Cost	Federal/MxD	Cost Share	Total					
		\$ -	\$ -	\$ -					
		\$ -	\$ -	\$ -					
		\$ -	\$ -	\$ -					
		\$ -	\$ -	\$ -					
Total		\$ -	\$ -	\$ -					
Other Direct Costs				Other Direct Costs					
Name	Description of Cost	Federal/MxD	Cost Share	Total					
		\$ -	\$ -	\$ -					
		\$ -	\$ -	\$ -					
		\$ -	\$ -	\$ -					
		\$ -	\$ -	\$ -					
Total		\$ -	\$ -	\$ -					
Subrecipients				Subrecipients					
Name	Comments	Federal/MxD	Cost Share	Total					
		\$ -	\$ -	\$ -					
		\$ -	\$ -	\$ -					
		\$ -	\$ -	\$ -					
		\$ -	\$ -	\$ -					
Total		\$ -	\$ -	\$ -					
INDIRECT COSTS				INDIRECT COSTS					
Cost Base Description	Cost Pool Description	Federal/MxD	Cost Share	Total					
		\$ -	\$ -	\$ -					
		\$ -	\$ -	\$ -					
		\$ -	\$ -	\$ -					
		\$ -	\$ -	\$ -					
Total		\$ -	\$ -	\$ -					
TOTAL PROJECT				TOTAL PROJECT					
		\$ -	\$ -	\$ -					
		0.00%	0.00%	0.00%					



Clicking on a grey locked cell will result in this message

The template is scalable out to Year 3. Click on the individual years to show/hide

Show/Hide Years <input checked="" type="checkbox"/> Year 1 <input type="checkbox"/> Year 2 <input type="checkbox"/> Year 3											
COST ELEMENTS						Year 1			Total Project Costs		
DIRECT LABOR:									DIRECT LABOR:		
Name	Position/Title	Hourly Rate - Y1	Hours - Y1	Fringe % - Y1	Overhead % - Y1	Total - Y1	Cost Share - Y1	Cost share % - Y1	Federal/MxD	Cost Share	Total
						\$ -		-	\$ -	\$ -	\$ -
						\$ -		-	\$ -	\$ -	\$ -
						\$ -		-	\$ -	\$ -	\$ -
						\$ -		-	\$ -	\$ -	\$ -
Total		\$ -	-	0%	0%	\$ -	\$ -	0%	\$ -	\$ -	\$ -
OTHER DIRECT COSTS:									OTHER DIRECT COSTS:		
Consultants									Consultants		
Name	Description of Cost	Unit cost - Y1	Units - Y1			Total - Y1	Cost Share - Y1	Cost share % - Y1	Federal/MxD	Cost Share	Total
						\$ -		-	\$ -	\$ -	\$ -
						\$ -		-	\$ -	\$ -	\$ -
						\$ -		-	\$ -	\$ -	\$ -
						\$ -		-	\$ -	\$ -	\$ -
Total		\$ -	-			\$ -	\$ -	0%	\$ -	\$ -	\$ -

Within each cost element click on "Add" to add rows and "Remove" to remove rows

Populate actual Cost Share Dollars here. The percentages will auto calculate

Populate cost data for each element. Totals, averages, and cost share percentages will auto populate.