

## Helpful Guide to DARPA Proposals

This guide is not available as a Word document.

*Disclaimer – the examples provided in this document are for illustration only. The examples and the comments on page maximums are based on several recent BAAs. However, be aware that format is subject to vary by BAA or solicitation.*

***\*You must consult specific BAAs and solicitations for relevant proposal requirements.***

### *Caltech-specific Helpful Hints*

- You will need a Division Approval Form, signed by all PIs and Division Chairs
- Grants Manager(s) will complete Volume II – Cost Proposal, but they need information from the PIs on personnel, expenses, materials, timelines – get this info to them as early in the process as possible since they need to build several Excel pages for the proposal.
- *Note: Several Grants Managers in CCE have completed the Volume II for DARPA proposals and may be able to share expert advice, depending on their availability.*
- Your OSP contact will compose the Official Transmittal Letter required in Volume I. Ask your contact to address Caltech's conflict of interest system in this letter, which will serve as your "Organization Conflicts of Interest Response" for the Volume II, Checklist.

### *General Formatting Requirements*

- Font type/size – Times New Roman, 12 pt or larger
- Line spacing – no more than 6 lines of type per vertical inch; single columns only
- Page size – 8.5"x11"
- Margins – 1" on all sides

### *Restrictive Markings on Proposals – info directly from recent DARPA BAAs*

All proposals should clearly indicate limitations on the disclosure of their contents. Proposers who include in their proposals data that they do not want disclosed to the public for any purpose, or used by the Government except for evaluation purposes, shall:

- (1) Mark the title page with the following legend: This proposal includes data that shall not be disclosed outside the Government and shall not be duplicated, used, or disclosed-in whole or in part-for any purpose other than to evaluate this proposal. If, however, a contract is awarded to this proposer as a result of, or in connection with, the submission of this data, the Government shall have the right to duplicate, use, or disclose the data to the extent provided in the resulting contract. This restriction does not limit the Government's right to use information contained in this data if it is obtained from another source without restriction. The data subject to this restriction are contained in sheets [insert numbers or other identification of sheets]; and
  - (2) Mark each sheet containing restricted data with the following legend: *Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this proposal.*
- NOTE: Confidential, Secret and Top Secret are classification markings used to control the dissemination of US Government National Security Information (NSI) as dictated in Executive Order 13526 - "Classified National Security Information". When referencing business proprietary information in a response to this BAA, please refrain from using any combination of the NSI caveats unless the content is classified.

## **Volume I – Technical & Management Plan (20 page maximum; PDF only)**

### Section I. Administrative

- A. Cover Sheet (LABELED “PROPOSAL: VOLUME I”):
1. BAA number (DARPA-BAA-###);
  2. Technical area;
  3. Lead organization (prime contractor);
  4. Type of organization, selected from among the categories offered in BAA;
  5. Proposer’s reference number (if any);
  6. Other team members (if applicable) and type of business for each;
  7. Proposal title;
  8. Technical point of contact (Program Manager or Principle Investigator) to include: salutation, last name, first name, street address, city, state, zip code, telephone, fax, email;
  9. Contracting Officer or Grant Officer to include: salutation, last name, first name, street address, city, state, zip code, telephone, fax, e-mail;
  10. Award instrument requested: cost-plus-fixed-fee (CPFF), cost-contract—no fee, firm fixed-price, grant, cooperative agreement, other transaction, or other type (specify);
    - a. Information on award instruments is available at <http://www.darpa.mil/work-with-us/contractmanagement>
  11. Place(s) and period(s) of performance;
  12. Proposal validity period;
  13. DUNS number (<http://www.dnb.com/duns-number.html>);
  14. Taxpayer ID number (<https://www.irs.gov/Individuals/International-Taxpayers/Taxpayer-Identification-Numbers-TIN>);
  15. CAGE code (<https://cage.dla.mil/Home/UsageAgree>);
  16. Official Transmittal Letter.

### Section II. Detailed Proposal Information

- A. Executive Summary: Provide a synopsis of the proposed project, including answers to the following questions:
- What is the proposed work attempting to accomplish or do?
  - How is it done today, and what are the limitations?
  - What is innovative in your approach?
  - What are the key technical challenges in your approach and how do you plan to overcome these?
  - Who or what will be affected and what will be the impact if the work is successful?
  - How much will it cost, and how long will it take?
- B. Goals and Impact: Clearly describe what the team is trying to achieve and the difference it will make (qualitatively and quantitatively) if successful. Describe the innovative aspects of the project in the context of existing capabilities and approaches, clearly delineating the uniqueness and benefits of this project in the context of the state of the art,

alternative approaches, and other projects from the past and present. Describe how the proposed project is revolutionary and how it significantly rises above the current state of the art. Describe the deliverables associated with the proposed project and any plans to commercialize the technology, transition it to a customer, or further the work.

- C. Technical Plan: Outline and address technical challenges inherent in the approach and possible solutions for overcoming potential problems. This section should provide appropriate measurable milestones (quantitative if possible) at intermediate stages of the program to demonstrate progress, and a plan for achieving the milestones. The technical plan should demonstrate a deep understanding of the technical challenges and present a credible (even if risky) plan to achieve the program goal. Discuss mitigation of technical risk.
- D. Management Plan: Provide a summary of expertise of the team, including any subcontractors, and key personnel who will be doing the work. ***Resumes & biosketches typically count against the proposal page count; to allow more space for the technical section, a short paragraph or bullet list format is helpful for Section D.*** Identify a principal investigator for the project. Provide a clear description of the team's organization including an organization chart that includes, as applicable: the programmatic relationship of team members; the unique capabilities of team members; the task responsibilities of team members, the teaming strategy among the team members; and key personnel with the amount of effort to be expended by each person during each year. Provide a detailed plan for coordination including explicit guidelines for interaction among collaborators/subcontractors of the proposed effort. Include risk management approaches. Describe any formal teaming agreements that are required to execute this program.

\*\*\*\*\*Samples for Section D: Management Plan\*\*\*\*\*

Summary of the Team's Expertise

*[short paragraph/bullet form; biosketches are usually counted toward page limits]*

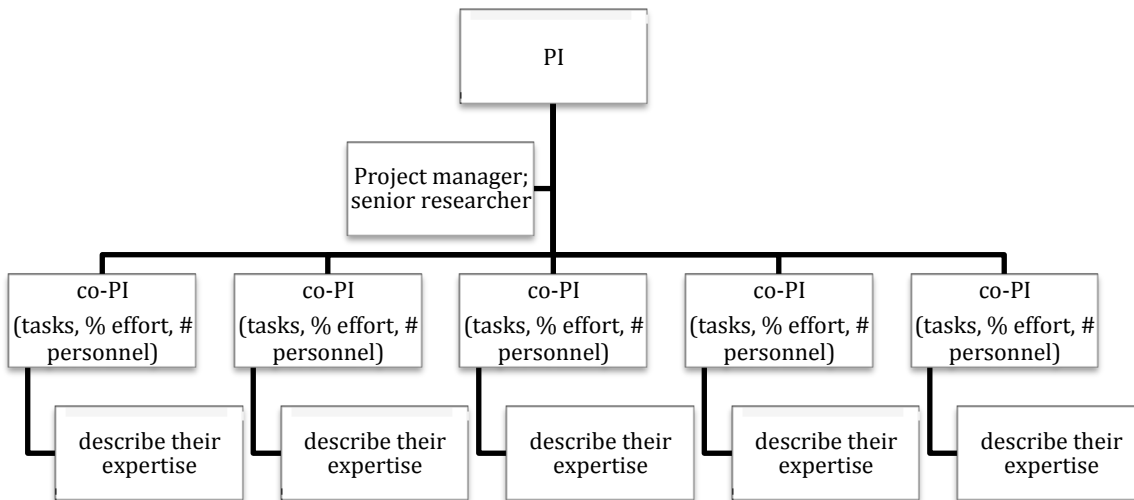
***PI [Name] – refer to position, relevant roles, honors & awards. Cite references.***

***PI [Name] – refer to position, relevant roles, honors & awards. Cite references.***

***PI [Name] – refer to position, relevant roles, honors & awards. Cite references.***

***PI [Name] – refer to position, relevant roles, honors & awards. Cite references.***

Example - Organization Chart [Note: SmartArt in Word has an easy-to-use Org Chart Template]



Example - Coordination Plan

*This collaborative research effort will be managed by PI [Name] [with the assistance of...if you intend to have a senior postdoc, project manager(s), senior engineer, etc]. The team is located at [place(s)], [give a few reasons why this is an ideal situation for this project]. [No] formal teaming agreements are required to execute this project [if team is at separate locations, teaming agreements may be necessary; describe the terms here].*

*The team will use the following methods to coordinate effort and maintain communication among participants: [tasks “usually required by DARPA” are indicated; format should be tailored to fit the project]*

- *Kick-off Meeting [usually required by DARPA] – The team will hold a kick-off meeting within 60 days of award to present the project management plan to the team.*
- *[Periodic] Team Meetings [not always required, but viewed favorably] – The team will assemble as a group and present data from the previous periods’ work, describing how new results contribute to required milestones and discussing any challenges that arise. Information shared in these meetings will form the basis for Quarterly Technical Reports.*
- *Monthly Financial Reports [usually required by DARPA] – Monthly financial reports will be prepared that will include brief project progress updates and inform the DARPA Program Manager of any potential issues.*
- *Quarterly Technical Reports [usually required by DARPA] – Quarterly progress reports will be prepared and will present a summary of work completed by SOW tasking and milestones met, discuss any problems encountered, update the program schedule, present the program financial status, and discuss remaining work.*
- *Final Contract Review [usually required by DARPA] – At the end of the program, a final contract review will present all work completed and milestones accomplished and discuss any relevant future efforts similar to the award, which may be pursued.*
- *Risk Management Approaches [usually required by DARPA] – the team will maintain internal communication as described, allowing responsive discussion of technical challenges as they arise. PI [Name] will keep the DARPA Program Manager informed of any technical challenges and their effect(s), if any, on milestones.*

- E. Capabilities: Describe organizational experience in relevant subject area(s), existing intellectual property, specialized facilities, and any Government-furnished materials or information. Discuss any work in closely related research areas and previous accomplishments. You will need to address this info for each institution/organization involved in the project. For details on individual accomplishments, you may refer the reviewer(s) back to the investigator biographies in the Management Plan, Section D.
- F. Statement of Work (SOW): The SOW should align with the Technical Plan and provide a detailed task breakdown, citing specific tasks and their connection to the interim milestones and program metrics. Each phase of the program should be separately defined. ***The SOW must not include proprietary information.*** If addressing multiple task areas within the chosen program track a separate statement of work and budget plan must be submitted for each task area.
- For each task/subtask, provide:
    - A detailed description of the approach to be taken to accomplish each defined task/subtask.
    - Identification of the primary organization responsible for task execution (prime contractor, subcontractor(s), consultant(s), by name).
    - A measurable milestone, i.e., a deliverable, demonstration, or other event/activity that marks task completion. Include quantitative metrics.
    - A definition of all deliverables (e.g., data, reports, software) to be provided to the Government in support of the proposed tasks/subtasks.

\*\*\*\*\*Samples for Section F: Statement of Work\*\*\*\*\*

Period of Performance:  
Place(s) of Performance:

All tasks will be performed at [Institution/Organization]. Leading investigators, responsible for managing and driving efforts, are indicated for each task. Deliverables for all Phases will include, as applicable: [relevant materials and data]; and technical progress reports, slides, and posters.

**Phase I (duration)**

*Goal(s): [from BAA]*

- **Task 1 (PI names): Demonstrate...**  Milestone 1:
- **Task 2 (PI names): Demonstrate...**  Milestone 2:
- **Task 3 (PI names): Demonstrate...**  Milestone 3:
- **Task 4 (PI names): Demonstrate...**
  - Sub-task 4.1:  Milestone 4:
  - Sub-task 4.2:  Milestone 5:
- **Task 5 (PI names): Demonstrate...**
  - Sub-task 5.1:  Milestone 6:
  - Sub-task 5.2:  Milestone 7:

## Phase II (duration)

Goal(s): [from BAA]

- **Task 6 (PI names): Demonstrate...**  Milestone 8:
- **Task 7 (PI names): Demonstrate...**  Milestone 9:
- **Task 8 (PI names): Demonstrate...**  Milestone 10:

## Phase III (duration)

Goal(s): [from BAA]

- **Task 9 (PI names): Demonstrate...**
  - Sub-task 9.1:  Milestone 11:
  - Sub-task 9.2:  Milestone 12:
- **Task 10 (PI names): Demonstrate...**
  - Sub-task 10.1:  Milestone 13:
  - Sub-task 10.2:  Milestone 14:
  - Sub-task 10.3:  Milestone 15:

- G. Schedule and Milestones: Provide a detailed schedule showing tasks (task name, duration, work breakdown structure element as applicable, performing organization), milestones, and the interrelationships among tasks. ***The task structure must be consistent with that in the SOW.*** Measurable milestones should be clearly articulated and defined in time relative to the start of the project.
- Insert graphic (if used) – [often a Gantt-like image with milestones listed on the left, timelines extending to the right, and scheduled task completion dates highlighted (with an arrow, star, etc)]
  - Insert budget summary table
  - *Keep in mind – The Schedule & Milestones must be consistent with the Statement of Work. As you make changes to Section F, those changes must be reflected in Section G.*

## Section III. Additional Information [as specified by solicitation]

- May include bibliography, publications, current & pending support (if requested)

## **Volume II – Cost Proposal (no page limit; PDF or Excel format)**

*Note: examples are offered below, but be aware that content required for the budget & justification and cost breakdowns **may vary by BAA.***

- A. Cover sheet
- B. Cost proposal checklist (must be included with the cover sheet)
  - 1. Organizational Conflicts of Interest Response – request your OSP contact person include this in their Official Transmittal Letter
  - 2. Data Rights Assertions Table/Certification – a simple statement is sufficient if no rights are withheld; a table can be included as an attachment to delineate specific rights offered with restrictions.
- C. Budget and justification (in editable Excel spreadsheet)
- D. Detailed cost breakdowns by category, phase, task, month
  - 1. summary cost buildup by Phase
  - 2. summary cost buildup by year
  - 3. detailed cost buildup for each Phase that breaks out each task and shows the cost per month
    - i. breakout must include
      - 1. direct labor
      - 2. indirect costs
      - 3. materials and/or equipment
      - 4. subcontracts/consultants
      - 5. other direct costs
      - 6. travel
- Volume II must include:
  - Documentation for proposed travel costs
  - Priced bill-of-materials (BOM)
  - Vendor quotes for all material and equipment over \$5000
  - Cost of labor justification

**Volume II - Cost Proposal  
California Institute of Technology**

**COVER SHEET**

(1) BAA number:	<b>DARPA-BAA-###</b>
(2) Technical area:	
(3) Lead Organization submitting proposal:	<b>California Institute of Technology</b>
(4) Type of business, selected among the following categories: “LARGE BUSINESS”, “SMALL DISADVANTAGED BUSINESS”, “OTHER SMALL BUSINESS”, “HBCU”, “MI”, “OTHER EDUCATIONAL”, OR “OTHER NONPROFIT”:	<b>OTHER EDUCATIONAL</b>
(5) Contractor’s reference number (if any):	<b>N/A</b>
(6) Other team members (if applicable) and type of business for each:	<b>N/A</b>
(7) Proposal title:	
(8) Technical point of contact to include: salutation, last name, first name, street address, city, state, zip code, telephone, fax (if available), electronic mail (if available):	<b>Caltech Principal Investigator [NAME] 1200 East California Boulevard, Mail Code Pasadena, CA 91125 Telephone: (626) 395- E-Mail:</b>
(9) Administrative point of contact to include: salutation, last name, first name, street address, city, state, zip code, telephone, fax (if available), and electronic mail (if available):	<b>[NAME] 1200 East California Boulevard, Mail Code Pasadena, CA 91125 Telephone: (626) 395-, Fax: (626) 795- E-Mail: sponsored.research@caltech.edu</b>
(10) Award instrument requested: cost-plus-fixed-fee (CPFF), cost-contract—no fee, cost sharing contract – no fee, or other type of procurement contract ( <i>specify</i> ), or other transaction:	
(11) Place(s) and period(s) of performance:	<b>Place of Performance: California Institute of Technology- Pasadena, CA Period of Performance: [duration]</b>
(12) Total proposed cost separated by basic award and option(s) (if any):	<b>Total Proposed Cost: \$</b>
(13) Name, address, and telephone number of the proposer’s cognizant Defense Contract Management Agency (DCMA) administration office ( <i>if known</i> ):	<b>Mrs. Veronica Y. Lacey Administrative Contracting Officer Office of Naval Research San Diego Region 140 Sylvester Road, Building 140 San Diego, CA 92106 Phone: 619-221-5494; Fax: 619-221-5615 veronica.lacey@navy.mil.com</b>
(14) Name, address, and telephone number of the proposer’s cognizant Defense Contract Audit Agency (DCAA) audit office ( <i>if known</i> ):	<b>DCAA San Gabriel Branch 1000 East Lakes Drive, Suite 400 West Covina, CA 91790-2900 Phone: 626-918-5922</b>
(15) Date proposal was prepared:	
(16) DUNS number:	<b>009584210</b>
(17) Taxpayer ID number:	<b>95-1643307</b>
(18) CAGE Code:	<b>80707</b>
(19) Proposal validity period:	<b>*usually one year from date of proposal</b>



**APPENDIX 1 – Volume II checklist**

**Volume II, Cost Proposal  
Checklist and Sample Templates**

**The following checklist and sample templates are provided to assist the proposer in developing a complete and responsive cost volume. Full instructions appear in Section ### beginning on Page ## of DARPA-BAA-###. This worksheet must be included with the coversheet of the Cost Proposal.**

1. Are all items from Section ### (Volume II, Cost Proposal) of DARPA-BAA-### included on your Cost Proposal cover sheet?

**YES**                       **NO**                      **Appears on Page(s)** [Volume II]

If reply is “No”, please explain:

2. Does your Cost Proposal include (1) a summary cost buildup by Phase, (2) a summary cost buildup by Year, and (3) a detailed cost buildup of for each Phase that breaks out each task and shows the cost per month?

**YES**                       **NO**                      **Appears on Page(s)** [Volume II]

If reply is “No”, please explain:

3. Does your cost proposal (detailed cost buildup #3 above in item 2) show a breakdown of the major cost items listed below:

Direct Labor (Labor Categories, Hours, Rates)  
 **YES**                       **NO**                      **Appears on Page(s)**  
[Volume II, Tab: A. Direct Labor]

Indirect Costs/Rates (i.e., overhead charges, fringe benefits, G&A)  
 **YES**                       **NO**                      **Appears on Page(s)**  
[Volume II, Tab: C. Indirect Costs]

Materials and/or Equipment  
 **YES**                       **NO**                      **Appears on Page(s)**  
[Volume II, Tab: F. Equipment Purchases,  
G. Materials]

Subcontracts/Consultants  
 **YES**                       **NO**                      **Appears on Page(s)** [None]

Other Direct Costs  
 **YES**                       **NO**                      **Appears on Page(s)**  
[Volume II, Tab: E. Other Direct Costs]

Travel  
 **YES**                       **NO**                      **Appears on Page(s)**  
[Volume II, Tab: D. Travel]

If reply is “No”, please explain:

4. Have you provided documentation for proposed costs related to travel, to include purpose of trips, departure and arrival destinations and sample airfare?  
 **YES**                       **NO**                      **Appears on Page(s)**  
[Volume II, Tab: D. Travel, Quotes pg ##]

If reply is “No”, please explain:

5. Does your cost proposal include a complete itemized list of all material and equipment items to be purchased (a priced bill-of-materials (BOM))?  
 **YES**                       **NO**                      **Appears on Page(s)**  
[Volume II, Tab: F. Equipment Purchases and G. Materials]

If reply is “No”, please explain:

6. Does your cost proposal include vendor quotes or written engineering estimates (basis of estimate) for all material and equipment with a unit price exceeding \$5000?  
 **YES**                       **NO**                      **Appears on Page(s)** [Quotes pg ##]

If reply is “No”, please explain:

7. Does your cost proposal include a clear justification for the cost of labor (written labor basis-of-estimate (BOE)) providing rationale for the labor categories and hours proposed for each task?  
 **YES**                       **NO**                      **Appears on Page(s)**  
[Volume II, Tab: A. Direct Labor]

If reply is “No”, please explain:

8. Do you have subcontractors/consultants? If YES, continue to question 9. If NO, skip to question 13.  
 **YES**                       **NO**                      **Appears on Page(s)** [None]

9. Does your cost proposal include copies of all subcontractor/consultant technical (to include Statement of Work) and cost proposals?  
 **YES**                       **NO**                      **Appears on Page(s)** [Type text]

If reply is “No”, please explain:

10. Do all subcontract proposals include the required summary buildup, detailed cost buildup, and supporting documentation (SOW, Bill-of-Materials, Basis-of-Estimate, Vendor Quotes, etc.)?

**YES**                       **NO**                      **Appears on Page(s)** [Type text]

If reply is “No”, please explain:

11. Does your cost proposal include copies of consultant agreements, if available?

**YES**                       **NO**                      **Appears on Page(s)** [Type text]

If reply is “No”, please explain:

12. If requesting a FAR-based contract, does your cost proposal include a tech/cost analysis for all proposed subcontractors?

**YES**                       **NO**                      **Appears on Page(s)** [Type text]

If reply is “No”, please explain:

13. Have all team members (prime and subcontractors) who are considered a Federally Funded Research & Development Center (FFRDC), included documentation that clearly demonstrates work is not otherwise available from the private sector AND provided a letter on letterhead from the sponsoring organization citing the specific authority establishing their eligibility to propose to government solicitations and compete with industry, and compliance with the associated FFRDC sponsor agreement and terms and conditions.

**YES**                       **NO**                      **Appears on Page(s)** [None]

If reply is “No”, please explain: Not applicable.

14. Does your proposal include a response regarding Organizational Conflicts of Interest?

**YES**                       **NO**                      **Appears on Page(s)**  
[Volume I, Official Transmittal Letter]

If reply is “No”, please explain:

15. Does your proposal include a completed Data Rights Assertions table/certification?

**YES**                       **NO**                      **Appears on Page(s)** [Volume I, page #]

If reply is “No”, please explain:

Agency:  
 Funding Opportunity Number:  
 Proposer Organization:  
 Project Title:  
 PI:  
 Period of Performance:

DARPA  
 DARPA-BAA-#####  
 California Institute of Technology

Volume II - Cost Proposal

SUMMARY BY MAJOR COST CATEGORIES

Cost Categories	Phase I [duration]	Phase II [duration]	Phase III [duration]	Total
<b>A. Direct Labor</b>				
<b>B. Consultant</b>				
<b>C. Indirect Costs*</b>				
Staff Benefits				
Indirect cost				
<b>Total Indirect Costs</b>				
<b>D. Travel</b>				
<b>E. Other Direct Costs</b>				
<b>F. Equipment Purchases</b>				
<b>G. Materials</b>				
<b>Total</b>				

\*Indirect costs reflects the modified indirect costs.

**Agency:** DARPA  
**Funding Opportunity Number:** DARPA-BAA-#####  
**Proposer Organization:** California Institute of Technology  
**Project Title:**  
**PI:**  
**Period of Performance:**

**Volume II - Cost Proposal**

***H. MAJOR PROGRAM TASKS BY GOVERNMENT FISCAL YEAR***

<b>Fiscal Year 1:</b>	
Task	Amount
Task 1	
Task 2	
Task 3	
Task 4	
Task 5	
Task 6	
Task 7	
Task 8	
Task 9	
Task 10	
Overall Project (not task-specific)	
<b>Total</b>	-

<b>Fiscal Year 2:</b>	
Task	Amount
Task 1	
Task 2	
Task 3	
Task 4	
Task 5	
Task 6	
Task 7	
Task 8	
Task 9	
Task 10	
Overall Project (not task-specific)	
<b>Total</b>	-

<b>Fiscal Year 3:</b>	
Task	Amount
Task 1	
Task 2	
Task 3	
Task 4	
Task 5	
Task 6	
Task 7	
Task 8	
Task 9	
Task 10	
Overall Project (not task-specific)	
<b>Total</b>	-

<b>Fiscal Year 4:</b>	
Task	Amount
Task 1	
Task 2	
Task 3	
Task 4	
Task 5	
Task 6	
Task 7	
Task 8	
Task 9	
Task 10	
Overall Project (not task-specific)	
<b>Total</b>	-

<b>Fiscal Year 5:</b>	
Task	Amount
Task 1	
Task 2	
Task 3	
Task 4	
Task 5	
Task 6	
Task 7	
Task 8	
Task 9	
Task 10	
Overall Project (not task-specific)	
<b>Total</b>	-

<b>Total</b>	
Task	Amount
Task 1	
Task 2	
Task 3	
Task 4	
Task 5	
Task 6	
Task 7	
Task 8	
Task 9	
Task 10	
Overall Project (not task-specific)	
<b>Total</b>	-

Agency: DARPA  
 Funding Opportunity Number: DARPA-BAA-#####  
 Proposer Organization: California Institute of Technology  
 Project Title:  
 PI:  
 Period of Performance:

Volume II - Cost Proposal

A. DIRECT LABOR

Labor Category	Name	Labor Rates (p/hr)	% effort	Labor Hours	Labor Amount			Total
					Phase I [duration]	Phase II [duration]	Phase III [duration]	
<b>Task 1</b>								
	Principal Investigator							
	Co-Principal Investigator							
	Co-Principal Investigator							
	Postdoctoral Scholar	To Be Determined						
	Postdoctoral Scholar	To Be Determined						
	Graduate Research Assistant	To Be Determined						
	<i>Subtotal Task 1</i>							
<b>Task 2</b>								
	Principal Investigator							
	Co-Principal Investigator							
	Co-Principal Investigator							
	Postdoctoral Scholar	To Be Determined						
	Postdoctoral Scholar	To Be Determined						
	Graduate Research Assistant	To Be Determined						
	<i>Subtotal Task 2</i>							
<b>Task 3</b>								
	Principal Investigator							
	Co-Principal Investigator							
	Postdoctoral Scholar	To Be Determined						
	Graduate Research Assistant	To Be Determined						
	<i>Subtotal Task 3</i>							
<b>Task 4</b>								
	Co-Principal Investigator							
	Postdoctoral Scholar	To Be Determined						
	<i>Subtotal Task 4</i>							
<b>Task 5</b>								
	Co-Principal Investigator							
	Co-Principal Investigator							
	Postdoctoral Scholar	To Be Determined						
	Postdoctoral Scholar	To Be Determined						
	Graduate Research Assistant	To Be Determined						
	Graduate Research Assistant	To Be Determined						
	<i>Subtotal Task 5</i>							



Labor Category	Name	Labor Rates (p/hr)	% effort	Labor Hours	Labor Amount			Total
					Phase I [duration]	Phase II [duration]	Phase III [duration]	
<b>Task 6</b>								
	Principal Investigator							
	Co-Principal Investigator							
	Co-Principal Investigator							
	Co-Principal Investigator							
	Postdoctoral Scholar	To Be Determined						
	Postdoctoral Scholar	To Be Determined						
	Postdoctoral Scholar	To Be Determined						
	Postdoctoral Scholar	To Be Determined						
	Graduate Research Assistant	To Be Determined						
	Graduate Research Assistant	To Be Determined						
	Graduate Research Assistant	To Be Determined						
	<i>Subtotal Task 6</i>							
<b>Task 7</b>								
	Principal Investigator							
	Co-Principal Investigator							
	Postdoctoral Scholar	To Be Determined						
	Postdoctoral Scholar	To Be Determined						
	Postdoctoral Scholar	To Be Determined						
	<i>Subtotal Task 7</i>							
<b>Task 8</b>								
	Principal Investigator							
	Co-Principal Investigator							
	Co-Principal Investigator							
	Postdoctoral Scholar	To Be Determined						
	Postdoctoral Scholar	To Be Determined						
	Postdoctoral Scholar	To Be Determined						
	Graduate Research Assistant	To Be Determined						
	Graduate Research Assistant	To Be Determined						
	<i>Subtotal Task 8</i>							
<b>Task 9</b>								
	Principal Investigator							
	Co-Principal Investigator							
	Co-Principal Investigator							
	Postdoctoral Scholar	To Be Determined						
	Postdoctoral Scholar	To Be Determined						
	Postdoctoral Scholar	To Be Determined						
	Graduate Research Assistant	To Be Determined						
	<i>Subtotal Task 9</i>							
<b>Task 10</b>								
	Principal Investigator							
	Co-Principal Investigator							
	Co-Principal Investigator							
	Co-Principal Investigator							
	Co-Principal Investigator							
	Postdoctoral Scholar	To Be Determined						
	Postdoctoral Scholar	To Be Determined						
	Postdoctoral Scholar	To Be Determined						
	Postdoctoral Scholar	To Be Determined						
	Graduate Research Assistant	To Be Determined						
	Graduate Research Assistant	To Be Determined						
	<i>Subtotal Task 10</i>							

Labor Category	Name	Labor Rates (p/hr)	% effort	Labor Hours	Labor Amount			
					Phase I [duration]	Phase II [duration]	Phase III [duration]	Total
<b>Overall Project (not task-specific)</b>								
Program Manager								
<i>Subtotal Overall Project</i>								
<b>TOTAL DIRECT LABOR</b>					-	-	-	-

Basis-of-Estimate Narrative

GRA salary rate based on \$[##]/hr for the Division of [Name].

Postdoctoral Scholar salary rate based on \$[##]/hr for the Division of [Name].

A #% inflation rate per year has been applied to all labor starting in Year 2.

Labor hours per year is calculated at 2,080 hours.

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***B. CONSULTANTS***

*NO CONSULTANTS*

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**C. INDIRECT COSTS**

Indirect Costs Category	Rate %	Phase I [duration]	Phase II [duration]	Phase III [duration]	Total
<b>Task 1</b>					
Staff Benefits					
Indirect cost					
<i>Modified Indirect Cost Base</i>					
<b>Total Task Indirect Costs</b>					
<b>Task 2</b>					
Staff Benefits					
Indirect cost					
<i>Modified Indirect Cost Base</i>					
<b>Total Task Indirect Costs</b>					
<b>Task 3</b>					
Staff Benefits					
Indirect cost					
<i>Modified Indirect Cost Base</i>					
<b>Total Task Indirect Costs</b>					
<b>Task 4</b>					
Staff Benefits					
Indirect cost					
<i>Modified Indirect Cost Base</i>					
<b>Total Task Indirect Costs</b>					
<b>Task 5</b>					
Staff Benefits					
Indirect cost					
<i>Modified Indirect Cost Base</i>					
<b>Total Task Indirect Costs</b>					

Indirect Costs Category	Rate	Phase I	Phase II	Phase III	Total
	%	[duration]	[duration]	[duration]	
<b>Task 6</b>					
Staff Benefits					
Indirect cost					
<i>Modified Indirect Cost Base</i>					
<b>Total Task Indirect Costs</b>					
<b>Task 7</b>					
Staff Benefits					
Indirect cost					
<i>Modified Indirect Cost Base</i>					
<b>Total Task Indirect Costs</b>					
<b>Task 8</b>					
Staff Benefits					
Indirect cost					
<i>Modified Indirect Cost Base</i>					
<b>Total Task Indirect Costs</b>					
<b>Task 9</b>					
Staff Benefits					
Indirect cost					
<i>Modified Indirect Cost Base</i>					
<b>Total Task Indirect Costs</b>					
<b>Task 10</b>					
Staff Benefits					
Indirect cost					
<i>Modified Indirect Cost Base</i>					
<b>Total Task Indirect Costs</b>					
<b>Overall Project (not task-specific)</b>					
Staff Benefits					
Indirect cost					
<i>Modified Indirect Cost Base</i>					
<b>Total Indirect Costs (not task-specific)</b>					
<i>Total Staff benefits</i>					
<i>Total indirect costs</i>					
<i>Total modified indirect cost base</i>					
<b>TOTAL INDIRECT COSTS</b>					

Staff Benefit Rate: #% (excluding graduate salaries). Tuition Remission: #% (not subject to indirect cost)  
Indirect Cost Rate: #% (excluding tuition remission and equipment)  
Indirect costs reflects the modified indirect costs.

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**D. TRAVEL**

Trip Purpose	Destination	Number of Trips	Number of Nights	Number of Travelers	Air	Meals	Meals (first/last day)	Lodging	Transportation	Trip per Person	Phase I [duration]	Phase II [duration]	Phase III [duration]	Total
DARPA Program Kickoff Meeting	Continental US	1	2											
Semi-Annual PI Meetings	Continental US	2	2											
Semi-Annual PI Meetings	Continental US	2	2											
<b>TOTAL TRAVEL</b>														

\*A #% inflation rate per year has been applied to all travel starting in Year 2; Travel of [describe personnel] is planned for the DARPA meetings.  
 Travel cost based on a trip to Arlington, VA, but actual destination will be determined by DARPA.

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***E. OTHER DIRECT COSTS***

Item	Qty	Unit Price	Source of the Unit Price	Basis of Estimate	Phase I [duration]	Phase II [duration]	Phase III [duration]	Total
<b>Task 1</b>								
				Prior Purchases				
				Prior Purchases				
				Prior Purchases				
				Prior Purchases				
Graduate Tuition Remission								
<i>Subtotal Task 1</i>								
<b>Task 2</b>								
				Prior Purchases				
				Prior Purchases				
				Prior Purchases				
				Prior Purchases				
Graduate Tuition Remission								
<i>Subtotal Task 2</i>								
<b>Task 3</b>								
				Prior Purchases				
				Prior Purchases				
				Prior Purchases				
				Prior Purchases				
Graduate Tuition Remission								
<i>Subtotal Task 3</i>								
<b>Task 4</b>								
<i>Subtotal Task 4</i>								
<b>Task 5</b>								
Graduate Tuition Remission								
<i>Subtotal Task 5</i>								

Item	Qty	Unit Price	Source of the Unit Price	Basis of Estimate	Phase I [duration]	Phase II [duration]	Phase III [duration]	Total
<b>Task 6</b>								
				Prior Purchases				
				Prior Purchases				
				Prior Purchases				
				Prior Purchases				
Graduate Tuition Remission								
<i>Subtotal Task 6</i>								
<b>Task 7</b>								
				Prior Purchases				
				Prior Purchases				
				Prior Purchases				
				Prior Purchases				
<i>Subtotal Task 7</i>								
<b>Task 8</b>								
				Prior Purchases				
				Prior Purchases				
				Prior Purchases				
				Prior Purchases				
Graduate Tuition Remission								
<i>Subtotal Task 8</i>								
<b>Task 9</b>								
				Prior Purchases				
				Prior Purchases				
				Prior Purchases				
				Prior Purchases				
Graduate Tuition Remission								
<i>Subtotal Task 9</i>								
<b>Task 10</b>								
				Prior Purchases				
				Prior Purchases				
				Prior Purchases				
				Prior Purchases				
Graduate Tuition Remission								
<i>Subtotal Task 10</i>								
<b>TOTAL OTHER DIRECT COSTS</b>								

\*A #% inflation rate has been applied to all cost starting in Year 2.



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***F. EQUIPMENT PURCHASES***

Item	Qty	Unit Price	Proposed Vendors (if known)	Basis of Estimate (e.g. quote, prior purchases, cataloge, etc)	Phase I [duration]	Phase II [duration]	Phase III [duration]	Total
<b>TOTAL EQUIPMENT</b>					<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

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G. MATERIALS

Item	Qty	Unit Price	Proposed Vendors	Basis of Estimate	Phase I [duration]	Phase II [duration]	Phase III [duration]	Total
<b>Task 1</b>								
	Various	Various	Various	Prior Purchases				
	Various	Various	Various	Prior Purchases				
	Various	Various	Various	Prior Purchases				
<i>Subtotal Task 1</i>								
<b>Task 2</b>								
	Various	Various	Various	Prior Purchases				
	Various	Various	Various	Prior Purchases				
	Various	Various	Various	Prior Purchases				
<i>Subtotal Task 2</i>								

Item	Qty	Unit Price	Proposed Vendors	Basis of Estimate	Phase I [duration]	Phase II [duration]	Phase III [duration]	Total
<b>Task 3</b>								
	Various	Various	Various	Prior Purchases				
	Various	Various	Various	Prior Purchases				
	Various	Various	Various	Prior Purchases				
<i>Subtotal Task 3</i>								
<b>Task 4</b>								
	Various	Various	Various	Prior Purchases				
	Various	Various	Various	Prior Purchases				
	Various	Various	Various	Prior Purchases				
<i>Subtotal Task 4</i>								
<b>Task 5</b>								
	Various	Various	Various	Prior Purchases				
	Various	Various	Various	Prior Purchases				
	Various	Various	Various	Prior Purchases				
<i>Subtotal Task 5</i>								
<b>Task 6</b>								
	Various	Various	Various	Prior Purchases				
	Various	Various	Various	Prior Purchases				
	Various	Various	Various	Prior Purchases				
<i>Subtotal Task 6</i>								

Item	Qty	Unit Price	Proposed Vendors	Basis of Estimate	Phase I [duration]	Phase II [duration]	Phase III [duration]	Total
<b>Task 7</b>								
	Various	Various	Various	Prior Purchases				
	Various	Various	Various	Prior Purchases				
	Various	Various	Various	Prior Purchases				
<i>Subtotal Task 7</i>								
<b>Task 8</b>								
	Various	Various	Various	Prior Purchases				
	Various	Various	Various	Prior Purchases				
	Various	Various	Various	Prior Purchases				
<i>Subtotal Task 8</i>								
<b>Task 9</b>								
	Various	Various	Various	Prior Purchases				
	Various	Various	Various	Prior Purchases				
	Various	Various	Various	Prior Purchases				
<i>Subtotal Task 9</i>								

Item	Qty	Unit Price	Proposed Vendors	Basis of Estimate	Phase I [duration]	Phase II [duration]	Phase III [duration]	Total
<b>Task 10</b>								
	Various	Various	Various	Prior Purchases				
	Various	Various	Various	Prior Purchases				
	Various	Various	Various	Prior Purchases				
<i>Subtotal Task 10</i>								
<b>TOTAL MATERIALS</b>					-	-	-	-

\*A #% inflation rate has been applied to all material cost starting in Year 2.

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**I. SUMMARY OF PROJECTED FUNDING REQUIREMENTS BY MONTH**

**CALENDAR FISCAL YEAR 1:**

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Task 1													-
Task 2													-
Task 3													-
Task 4													-
Task 5													-
Task 6													-
Task 7													-
Task 8													-
Task 9													-
Task 10													-
Overall Project (not task-specific)													-
Grand Total	-	-	-	-	-	-	-	-	-	-	-	-	-

**CALENDAR FISCAL YEAR 2:**

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Task 1													-
Task 2													-
Task 3													-
Task 4													-
Task 5													-
Task 6													-
Task 7													-
Task 8													-
Task 9													-
Task 10													-
Overall Project (not task-specific)													-
Grand Total	-	-	-	-	-	-	-	-	-	-	-	-	-

**CALENDAR FISCAL YEAR 3:**

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Task 1													-
Task 2													-
Task 3													-
Task 4													-
Task 5													-
Task 6													-
Task 7													-
Task 8													-
Task 9													-
Task 10													-
Overall Project (not task-specific)													-
Grand Total	-	-	-	-	-	-	-	-	-	-	-	-	-

**CALENDAR FISCAL YEAR 4:**

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Task 1													-
Task 2													-
Task 3													-
Task 4													-
Task 5													-
Task 6													-
Task 7													-
Task 8													-
Task 9													-
Task 10													-
Overall Project (not task-specific)													-
Grand Total	-	-	-	-	-	-	-	-	-	-	-	-	-

**CALENDAR FISCAL YEAR 5:**

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Task 1													-
Task 2													-
Task 3													-
Task 4													-
Task 5													-
Task 6													-
Task 7													-
Task 8													-
Task 9													-
Task 10													-
Overall Project (not task-specific)													-
Grand Total	-	-	-	-	-	-	-	-	-	-	-	-	-

The amount shown is an estimated summary of monthly funding requirements.

Note - make sure the wording for all tasks match across all documents (proposal, milestone chart(s), SOW, etc)

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Summary by Task	Phase I	Phase II	Phase III	Total
	[duration]	[duration]	[duration]	
<b>Task 1</b> Demonstrate ... [include any relevant specifications provided by DARPA in the BAA].				
<b>Task 2</b> Demonstrate ... [include any relevant specifications provided by DARPA in the BAA].				
<b>Task 3</b> Demonstrate ... [include any relevant specifications provided by DARPA in the BAA].				
<b>Task 4</b> Demonstrate ... [include any relevant specifications provided by DARPA in the BAA].				
<b>Task 5</b> Demonstrate ... [include any relevant specifications provided by DARPA in the BAA].				
<b>Task 6</b> Demonstrate ... [include any relevant specifications provided by DARPA in the BAA].				
<b>Task 7</b> Demonstrate ... [include any relevant specifications provided by DARPA in the BAA].				



Summary by Task	Phase I [duration]	Phase II [duration]	Phase III [duration]	Total
<b>Task 8</b> Demonstrate ... [include any relevant specifications provided by DARPA in the BAA].				
<b>Task 9</b> Demonstrate ... [include any relevant specifications provided by DARPA in the BAA].				
<b>Task 10</b> Demonstrate ... [include any relevant specifications provided by DARPA in the BAA].				
<b>Overall Project (not task-specific)</b> Travel and program manager cost				
<b>Total</b>				