18 November 2016

Organization and Functions

COST-BENEFIT ANALYSIS TO SUPPORT ARMY ENTERPRISE DECISION-MAKING

FOR THE COMMANDER

OFFICIAL: PAUL M. BENENATI
                                                       Major General, U.S. Army
                                                       Deputy Chief of Staff

RICHARD A. DAVIS
Senior Executive
Deputy Chief of Staff, G-6

History: This publication is a rapid action revision to United States Army Training and Doctrine Command (TRADOC) regulation 11-20, dated 5 June 2013.

Summary. This regulation establishes policies, procedures, and responsibilities for cost-benefit analysis to support Army Enterprise decision-making within TRADOC.

Applicability. This regulation is applicable to all TRADOC units, activities, and organizations.

Proponent and exception authority. The proponent for this circular is the TRADOC Deputy Chief of Staff (DCS), G-8. The proponent has the authority to approve exceptions or waivers to this circular that are consistent with controlling law and regulations.

Army management and control procedures. This regulation does not contain management control provisions.

Suggested improvements. Users are invited to send comments and suggested improvements on Department of the Army Form 2028 (Recommended Changes to Publications and Blank Forms) directly to the TRADOC DCS, G-8 (ATRM-PD), 661 Sheppard Place, Fort Eustis, VA 23604.

*This regulation supersedes TRADOC Regulation 11-20, dated 5 June 2013.

TRADOC Regulation 11-20

Distribution. This publication is available only on the TRADOC Homepage at http://www.tradoc.army.mil/tpubs.

Summary of Changes

TRADOC Regulation 11-20
Cost-Benefit Analysis to Support Army Enterprise Decision Making

This rapid action revision, dated 18 November 16-

o Revises Proponency for the regulation (para 1-4b).

o Revises Cost-Benefit Analysis submission requirements (para 2-2).

o Revises location for all cost-benefit analysis information (para 2-3a).

o Revises information on training opportunities (para 2-5).

o Revises Cost-Benefit Analysis Review Board procedures (app B).

o Revises Course Resource Policy (app C).

Contents

Figure List

This page intentionally left blank

Chapter 1
Introduction

1-1. Purpose
This regulation establishes policies, procedures, and responsibilities for the preparation of cost-benefit analysis (C-BA) to support Army Enterprise decision making within United States Army Training and Doctrine Command (TRADOC).

1-2. References
Referenced and related publications and referenced forms are listed in appendix A.

1-3. Explanation of abbreviations and terms
Abbreviations and special terms used in this regulation are explained in the glossary.

1-4. Responsibilities

   a. The TRADOC Deputy Commanding General/Chief of Staff. The Deputy Commanding General/Chief of Staff will approve changes to this regulation.

   b. The TRADOC Deputy Chief of Staff (DCS), G-8. The TRADOC DCS, G-8 will:

      (1) Serve as the lead for this regulation.

      (2) Serve as the authority for all C-BA specified in paragraph 2.2 except those conducted in support of Army Joint Capabilities Integration and Development System documents.

      (3) Validate all cost and manpower data included in the C-BA.

      (4) Review and coordinate proposed changes and forward recommendations for approval to the TRADOC Deputy Commanding General/ Chief of Staff.

      (5) Serve as the staff lead for the C-BA Review Board (CBARB).

   c. The TRADOC DCS, G-3/5/7. The TRADOC DCS, G-3/5/7 will:

      (1) Assist the DCS, G-8.

      (2) Serve as co-chair of the TRADOC CBARB.

   d. The TRADOC Deputy Commanding General, Futures/Director, Army Capabilities Integration Center (ARCIC) will:

      (1) Serve as the authority for all C-BA conducted in support of Joint Capabilities Integration and Development System documents. ARCIC guidance is located in TRADOC Regulation 71-20, Concept Development, Capabilities Determination, and Capabilities Integration.

(2) Serve on CBARB as required.

e. The TRADOC DCS, G-1/4, G-2, G-3/5/7, G-6 and G-9 will provide subject matter expertise, when requested by the G-8 and/or G-3/5/7, to assist with CBARB.

Chapter 2
Policies and Procedures

2-1. Policy
This policy is designed to ensure scarce Army resources are only expended on programs in which benefits outweigh costs, meet requirements while building affordable capabilities, endorse/ reinforce Army policy within TRADOC, and to institutionalize a cost-benefit mindset within TRADOC.

2-2. Cost-benefit analysis (C-BA) requirement
C-BAs will be prepared for all new or expanded requirements (new programs or modification to existing programs) that require additional resources. This includes:

a. Requirements exceeding $10 million (M) in one year, or growing over 5% in one year, whichever is larger, or $50M over the program objective memorandum (POM) years. A Program Evaluation Group may require a C-BA for any dollar threshold.

b. Army Campaign Plan decision points.

c. Budget Review Plan or Army Requirements and Resource Board submissions.

d. Concept Plans exceeding $10M in one year or $50M over the POM years.

e. Stationing Plans when directed by Headquarters (HQ), Department of the Army (HQDA) to defend actions against Congressional scrutiny.

f. In response to any directive from Army leadership, Office of the Secretary of Defense, Congress, or as requested by TRADOC leadership.

g. Contract requirements that meet the threshold identified in paragraph 2-2a will be reviewed and approved in accordance with TR 5-14.

h. All new courses and course changes that incur resource increases will be staffed in accordance with Appendix C. These actions are not subject to TRADOC or HQDA CBARB review. This policy is located at Appendix C.

i. All Army direct funded service requirements (new, or expanded) valued at $10M and above in any fiscal year or $50M and above across the POM funding timeframe.

(1). New service requirement: A service requirement that has not previously been approved and does not have a C-BA or other analysis supportive of Army prioritization of funding (e.g. Analysis of Alternatives, Army Cost Position), and meets the dollar threshold applicability.

(2). Expanded service requirement: Any existing requirement with an executed C-BA, and an increase in value in excess of $10M in any one year over the life of the contract, including all option periods or $50M over the POM period will require initiation of a C-BA. Re-compete of service contracts supporting existing requirements is not an expanded requirement and does not require initiation of a C-BA.

2-3. C-BA process

a. The Office of the Deputy Assistant Secretary of the Army for Cost and Economics (DASA-CE) has developed a C-BA guide, a C-BA Checklist, and a decision brief format for use in preparing C-BA packages. These documents can be found at the Army Cost Management Portal (ACM) located at https://acm.army.mil/ (The ACM requires registration for access.) All C-BAs must adhere to the template and briefing format (TRADOC preferred) specified in the C-BA Guide. C-BA packages should include all spreadsheets with documented analysis and any supporting documents, including the C-BA checklist. If possible, proposed "tradeoffs" or bill payers to offset the cost of the new requirement should be included (Note: Headquarters, Department of the Army requires identification of bill payers or tradeoffs).

b. The C-BA will be submitted through the appropriate decision maker who controls the required resources within the chain of command. For requirements meeting the threshold specified in paragraph 2-2 above, submit C-BAs to the TRADOC DCS, G-8, Programs, Analysis, and Evaluation Directorate and the DCS, G-3/5/7, Priorities, Analysis, and Requirements Directorate. Submit C-BAs supporting Joint Capabilities and Development System capabilities documents to Director, ARCIC for approval.

c. All C-BAs and supporting documentation being submitted in accordance with para. 2-3a above for decision to HQ TRADOC will be submitted electronically using the C-BA Workflow Tool located on the ACM. After clicking "Input New C-BA," follow the instructions for entering the required information. Once uploaded the C-BA will be processed by the HQ TRADOC staff and if approved by the TRADOC CBARB, submitted to DASA-CE for Headquarters, Department of the Army review.

2-4. United States Army Training and Doctrine Command (TRADOC) C-BA Review Board (CBARB)

A TRADOC CBARB has been established, not to alter the decision making authority of commanders, but to ensure that decisions are analytically sound and based on robust analysis. The standard operating procedures for the CBARB are located at appendix B. The TRADOC CBARB is patterned after the Department of the Army board to facilitate hand-off of requirements. Standing members of the TRADOC board include representatives from the offices of the DCS, G-8, the DCS, G-3/5/7, who will co-chair the board, and on an as needed basis, a representative from office of the Director, ARCIC. Other organizations may have representatives on the board, dependent on the content/subject matter of the C-BA. Once approved for decision making by the

board, the board will send the C-BA to the appropriate resourcing forum for consideration, and will go through the usual decision making process.

2-5. C-BA training
C-BA training is available through three options:

a. For those individuals identified as Cost Management Advisors, General Fund Enterprise Business System cost advisors or are interested in learning more about measuring and managing cost in their command, training is available through nomination to the Cost Management Certification Course taught at the University of South Carolina. Information on this course and all C-BA-related training can be accessed at https://acm.army.mil/ via the Knowledge Center on the left side of the site.

The Cost Management Certification Course is designed to teach students at the GS-13/O4/E8 level and above, how to manage Army business operations efficiently and effectively through the accurate measurement and thorough understanding of the "Full Cost" of business processes, products, and services. While instruction involves an overview of C-BA development, the primary focus is on understanding the importance of cost-informed decision making. Nominees should demonstrate expertise both operationally and analytically to provide the necessary credibility for instituting a cost benefit mindset in the organization. Upon graduation, this individual should serve as a trusted advisor to the senior leader on cost management issues.

b. For C-BA specific training, training is available through:

(1) The United States Department of Agriculture Graduate School. The course is titled, "Cost Benefit Analysis Workshop," with course number PGMT8100. This is a 3-day course, taught at United States Department of Agriculture locations across the United States. The United States Department of Agriculture charges tuition for this course.

(2) Cost-Benefit Analysis 4-Day course. The DASA-CE conducts a four-day course on C-BA, taught at locations around the United States. This 4-Day CBA Training Class provides rigorous, analytical instruction, opportunities for hands-on application in performing Cost-Benefit Analyses, and one-on-one evaluation of work produced. The course teaches C-BA concepts, and how to teach the concepts. Top graduates of the course will be invited to become certified instructors of the material. Course information and math self-assessment can be found at https://acm.army.mil/. The class is recommended for personnel with direct exposure to conducting and applying C-BA to existing requirements and requirements generation. Contact the C-BA Training Administrator at 703-692-7496 or the CBA mailbox: usarmy.pentagon.hqda-asa-fm.mbx.cost-benefit-analysis-trng@mail.mil. Information on this course is available on the ACM.

Appendix A
References

Section I
Required Publications

Army Regulation 11-18, The Cost and Economic Analysis Program, dated 19 August 2014

Army Regulation 5-10, Stationing, dated 20 August 2010

TRADOC Regulation 5-14, Acquisition Management and Oversight, dated 8 January 2012

CBA Guide (DASA-CE), version 3.1, dated 24 April 2013

Vice Chief of Staff, Army/Under Secretary of the Army Memorandum, subject: Cost-Benefit Analysis to Support Army Enterprise Decision Making, dated 30 December 2009

Deputy Assistant Secretary of the Army, Acquisition Logistics and Technology Memorandum, subject: Cost-Benefit Analysis to Support Army Enterprise Decision Making on Service Requirements, dated 10 October 2014

Section II
Related Publications

Cost Management Handbook (DASA-CE), dated 13 April 2009

TRADOC Regulation 71-20, Concept Development, Capabilities Determination, and Capabilities Integration, dated 28 June 2013

Section III
Prescribed Forms

C-BA Checklist, dated 28 January 2013
C-BA Briefing Format, (Option 1) as of 26 April 2013

Section IV
Referenced Forms

Department of the Army Form 2028
Recommended Changes to Publications and Blank Forms\

Appendix B
Standard Operating Procedures for C-BA Review Board

B-1. Purpose
This document details the mission, membership, and operating procedures for the TRADOC CBARB.

B-2. CBARB mission
To ensure that TRADOC C-BA submissions are completed within established guidelines, are analytically sound, and provide the necessary analysis, TRADOC has instituted a CBARB comparable to the Department of the Army CBARB.

B-3. Membership
The TRADOC CBARB will have two standing members and a number of optional members that will vary from case to case.

   a. Standing members: In all cases, the CBARB will include one or more representatives from the G-3/5/7 and the G-8, with a representative from ARCIC as needed:

      (1) DCS, G-8 (chair) (Planning, Analysis, and Evaluation Directorate)

      (2) DCS, G-3/5/7 (Co-chair) (Programs, Analysis and Requirements Directorate)

      (3) Director, ARCIC (as needed)

   b. The standing members may designate additional required reviewers in other organizations to assist as needed.

B-4. Responsibilities of CBARB members
All CBARB members may offer comments and recommendations on any aspect of a C-BA that was submitted for review. However, primary responsibility for portions of the review is assigned to designated members.

   a. The TRADOC DCS, G-8 representative(s) has the primary responsibility for determining whether a C-BA is complete and clearly and logically presented. The G-8 is also responsible for ensuring cost data is from authoritative sources, is supported by adequate backup documentation, makes economic sense, and uses analytical techniques appropriate for the situation.

   b. The TRADOC DCS, G-3/5/7 has the responsibility for determining whether the C-BA identifies information on benefits, contains adequate backup documentation on benefits, and whether a proposed bill payer is consistent with the commander's priorities and considers all reasonably feasible courses of action.

   c. If called upon, the TRADOC DCS, G-1/4, DCS G-2, and DCS, G-6, and DCS G-9 members have the primary responsibility for determining whether issues within their areas of expertise are properly addressed.

d. If called upon, members from branch proponent organizations (TRADOC subject matter experts) assist in determining that the problem statement, assumptions, and constraints are clear and realistic; that all reasonably feasible courses of action have been considered; and that the recommended course of action is functionally sound and can be reasonably expected to achieve the stated objective.

B-5. Procedures

a. The C-BA and supporting documents will be distributed electronically via the ACM Portal. CBARB meetings and discussions may be conducted in person (primary method), using the ACM or via e-mail, as deemed appropriate by the chair.

b. The CBARB review process begins when the C-BA proponent submits the C-BA for review. Using the Cost Benefit Analysis Guide, the submission must include the complete C-BA, supporting documentation, and the name and contact information for the C-BA point of contact. The supporting documentation must identify data sources, models, inflation indexes, and rationale used to complete all eight steps of a C-BA, as summarized on pages 15 and 16 of the CBA Guide, and must be sufficiently detailed so that it can stand alone, without explanation by the preparer. Before submitting the C-BA, the C-BA point of contact must ensure it is complete by completing and submitting the C-BA checklist provided at the ACM.

c. The CBARB chair will forward the package to appropriate analysts in his/her division or other staff elements, as required for review. Each reviewer will forward the C-BA, as needed to address areas of responsibility and will, as necessary, contact the C-BA point of contact to address any questions or resolve any issues.

Those C-BAs determined to be insufficient will be returned to the originator for correction. The chair will review all responses and may discuss unresolved issues with the CBARB members or with the C-BA point of contact to reach a viable solution/conclusion. Once approved by the board, C-BAs will be sent to the appropriate resourcing forum for consideration, and will go through the usual decision making process.

_____

Appendix C
Course Resource Increase Policy Memorandum and abbreviated C-BA document example

C-1. Excerpt of the HQ TRADOC Memorandum
Figure C-1 provides the excerpt of the memorandum "Course Resource Increase Policy," dated 12 Feb 2016. Proponent organization for this memorandum is DCS, G-3/5/7 Training Operations Management Activity.

1.   Reference memorandum, HQ TRADOC, ATTG-TRI-MP, dated 19 Nov 2014, subject Course Resource Increase Policy.

2.   This memorandum supercedes referenced memorandum in paragraph 1 and supports the FY19 Structure Manning Decision Review (SMDR) and subsequent SMDRs.

3.   TRADOC continues to face a constrained resourse environment that affects our training mission. In order to maximize resources, we continue to review resource increases and endeavor to ensure we maximize internal resources before submission to HQDA. IAW existing policy, continue the Training Requirements Analysis System (TRAS) staffing and validation process for resource increases associated with new courses and course changes.

4.   Commanders and commandants need to continue to maage resources within available baselines and should emphasize resolving resource increases by offsetting resources from lesser priority missions/courses. If unable to do so, an explanation of efforts to provide offsets needs to be submitted. New courses or changes to existing courses with internal bill payers still require submission of programs of instruction (POIs) to HQ TRADOC for valisation and documentation. TRAS actions that do not involve resource changes, but require changes to the Army Training Requirements and Resource System, also need to be submitted to HQ TRADOC for approval.

5.   New courses or course changes that incur resource increases will need a TRAS abbreviated Cost-Benefit Analysis (TAC-BA) (Encl 1) and resource increase briefing slides (Encl 2).

    a. The TAC-BA aligns TRADOC with SECARMY guidance for decisions that involve resource changes. It is part of the process outlined in TRADOC Regulation 11-20, Cost-Benefit Anaysis to Support Army Enterprise Decision Making,   Oct 2016. Proponents requesting additional resources are responsible for developing, staffing, and submitting the TAC-BA in accordance with the enclosed format. Proponents should use the TAC-BA to identify the resource increases (i.e., manpower; trainees; transients; hold-under; students; funding; equipment; facilities; lnad; ranges; ammunition; training aids, devises, simulators, and simulations; lodging; Reserve Component pay and allowances, etc). Since resources are frequently shared across the installation or across the CoE, staffing from those organizations is necessary.

    b. Please prepare TRAS document submission IAW TR 350-70 and TRADOC PAM 350-70-9 and include staffing with the RC (U.S. Army Reserves and Army National Guard). POIs not formatted in accordance with training development capability for 2012 need to be updated to accurately validate resource requirements. HQ TRAADOC will validate the TRAS, TAC-BA, and resource increase briefing slides, then staff with the responsible core function lead (CFL) or staff.

This includes staffing initial military training courses with the U.S. Army Center for Initial Military Training; staffing professional military education-Noncommissioned Officer Education System courses with the Institute for NCO Professional Development.

   c. TRAS submissions with a non-concur by the CFL/staff element will be returned to the school for further action. Courses with a concur by the CFL/staff element will be forwarded to DCG, TRADOC for decision and will be briefed using the Resource Increase Briefing slides. Courses approved by the DCG will be presented to HQDA during the Institutional Training/Distributive Learning Council of Colonels and Training General Officer Steering Committee forums and subsequent disposition within the next SMDR.

   d. Pilot training classes and mobile training teams not programmed at the SMDR will be reviewed and approved by HQ TRADOC before being conducted.

Figure C-1. "Course Increase Resource Policy" HQ TRADOC Memorandum excerpt

C-2. Training Requirements Analysis System (TRAS) abbreviated C-BA (TAC-BA) document example
Figure C-2 provides examples and instructions on how to prepare the TAC-BA document for submission.

TRAS ABBREVIATED COST BENEFIT ANALYSIS (TAC-BA)

Format adopted from Secretary of the Army CBA guidance
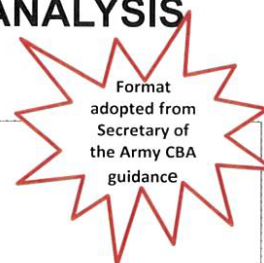
Table of Contents

I. Justification- Explain why additional resources are required.
  A. Needs Statement
  B. Objective
  C. Assumptions/Constraints

II. Courses of Action- Description and summary of each considered COA
  A. Description
  B. Advantages
  C. Disadvantages
  D. Benefits
  E. Projected Cost Summary

III. Decision Matrix- Compares COAs & Captures School/CoE decision process and recommendations

IV. Risk Assessment- Impact/risk to the Army for not implementing new course or course changes.

V. Staff Coordination/Concurrence- School/CoE staff coordination information

VI. Annexes (as required)- provides detailed information for resource increases. Only provide applicable annexes to explain resource increases. There is no requirement to submit annexes for the areas that do not have resource increases. Considered COAs do not need annexes, but must be made available upon request.
  * OMA cost can be obtained by contacting ATSC at 757-878-7001 ext 6510 or email david.doctor@us.army.mil.

  A. Manpower
  B. Equipment
  C. Ammunition
  D. Facilities
  E. Ranges/Land

  F. TADSS
  G. MTSA
  H. Other
  I. Funding Estimate

Note: *The abbreviated TAC-BA is submitted only for new courses or courses with resource increases.* All submitted TAC-BA will include sections I thru IV. Annexes in Section V will only be completed for those commodity areas with resource increases.

Figure C-2. Training Requirements Analysis System (TRAS) abbreviated C-BA (TAC-BA) document example

I. JUSTIFICATION
EXAMPLE

A. Needs Statement:

-Operational Needs Statement identified a need to conduct an intelligence decision analysis to directly support the BCT in the operational environment (OE). Through a needs analysis, we determined a gap in the current training capability to conduct an intelligence decision analysis.

-Intelligence Decision Analysis was identified as a critical capability gap and deficiency at CENTCOM Army Deployed Analyst Seminar (Oct 10). This is a Critical gap in Army's ability to model/conduct future/current operations in decision analyses.

-12 Dec 10, CSA Directed TRADOC to establish a plan to train intelligence decision analysts in current modeling technology NLT end of FY 13.

B. Objective: Use the most cost-effective and efficient concept to implement the CSA intent to train intelligence decision analysis at the tactical level (BCT) in institutional training to fulfill the acknowledged and validated need.

C. Assumptions:

-- TRADOC will not receive DA funding to implement the new course
-- New ASI will require trained decision analysts at the BCT/Division levels
-- Projected load is 200 per year beginning in FY13
-- Other lower priority missions will have to be reduced to offset resource increase.

Constraints:
-- School/COE does not have available resources to train the course

INSTRUCTIONS:

- **Needs Statement:** Describes the reason why the Army need to establish this new course or why a currently existing course must change. Explain the reason for the resource increase.
- **Objective:** What is the objective resulting in the increase of resources? This can be stated in terms of improved performance, reduced cost, or desired end state for the issue under consideration.
- **Assumptions and Constraints:** Include any assumptions and constraints used in the planning process. An assumption is something that is essential to the success of the recommended COA and over which we have no control. Constraints are schedule, resource, budget, staffing, technical, and other limitations that may impact the success of the COA.

2

Figure C-2. TAC-BA document example, continued

II. Course of Action (COA)

EXAMPLE

A. Description: Combination of Resident & dL . Establish a 1 week Intel Decision Analysis resident course with a 24 hour dL prerequisite	
B. Advantages: -Meets CSA guidance to fill a current gap with trained Intel decision analysts -Can be established and up and running quickly -Reduces resident course length with a dL prerequisites to cover knowledge level material	**C. Disadvantages:** -Lack of available subject matter expertise to teach resident course -Start up costs of $100K
B. Benefits: N/A	**E. Projected Cost Summary for Increases**($ in thousands): FY 13 $ 203K FY 14 $ 201K FY 15 $ 201K FY 16 $ 201K FY 17 $ 5951K Total Cost FY 13-17: $ 6757K

INSTRUCTIONS: Include a slide for each COA considered. Should include a minimum of three COAs (status quo, plus two).

A. Description - Provide a short description of the COA.

B. Advantages: List or describe the quantifiable and/or non-quantifiable

advantages with the COA.

C. Disadvantages: List or describe the quantifiable and/or non-quantifiable

disadvantages and risks associated with the COA.

D. Benefits. List any benefits of the COA to the Army (if applicable).

E. Cost: List IMCOM and TRADOC costs of the COA; include the years which

are pertinent.

- Include if internally/mission-resourced, as possible.

- Only list TRADOC and IMCOM costs for increased resources

Figure C-2. TAC-BA document example, continued

III. Decision Matrix

EXAMPLE

Criteria	Quality of Training	Train the Load/Student Throughput	Cost		
Relative importance of criteria	3	2	1		
	Value of Criteria Satisfaction (higher is better on a scale from1-3)			Calculations (Criteria Ranked 3*COA1 score #) +(Criteria Rank 2 *COA score#)+(Criteria Ranked 3*COA3score)= Sum	Sum
COA #1	1	1	3	3*1+2*1+3	6
COA #2	3	3	2	3*3+2*3+2	**17**
COA #3	3	1	1	3*3+2*1+1	12

Instructions:
1. Establish criteria categories and relative importance of criteria.
2. Weigh/prioritize each COA

NOTE:
- Highest score is best. The criteria are user defined and ranked by the organization doing the analysis (the user).
- Data values: Lower quantifiable data values are preferable. Better subjective ratings for non-quantifiable data values are preferable.
- List the criteria considered across the top of the matrix.
- Include a description /definition of each criteria used in the Decision Matrix.
- List the recommended COA below.

Recommendation: __COA 2__

Figure C-2. TAC-BA document example, continued

IV. Risk Assessment

Risk Assessment Matrix			Probability				
			Frequent	Likely	Occasional	Seldom	Unlikely
			1	2	3	4	5
Severity	Catastropic	1	2	3	4	5	6
	Critical	2	3	4	5	6	7
	Marginal	3	4	5	6	7	8
	Negligible	4	5	6	7	8	9

Risk Level	
	Extremely High
	High
	Moderate
	Low

	Probability	Severity	Total
Hazard: Inability to analyze enemy activiites in theater with new modeling techniques.	Occasional	Catastroph	4
Rating Justification: Intelligence analysts are not trained on new modeling techniques in decision analysis. This becomes critical to have a a trained analyst in the BCT for enemy decision loops. Could result in loss of life in the operational environment.			
Hazard:			
Rating Justification:			

Total Risk Rating:	High		4

Remarks: Risk to the Army is High for not establishing the Intelligence Decision Analyst course. This course is currently needed to establish a current operational Gap that directly supports the BCT in combat and could prevent loss of life in combat.

Instructions: Determine the overall risk level to the **Army** of not conducting this course by using the above risk assessment matrix.

Step 1. Identify and list each risk/hazard

Step 2. Determine the severity (catastrophic, critical, marginal, negligible) of each risk

Step 3. Determine probability (frequent, likely, occasional, seldom, unlikely) of each risk.

Step 4. Using the risk assessment matrix, score each risk

Step 5. Total all risk scores and divide by number of risks to get overall total score.

Step 6. Determine where the overall total score falls on the risk assessment matrix (extremely high, high, moderate, low).

• Use remarks block to list the overall impact /risk of not conducting the course as recommended.

May use other risk assessment sources, but must provide data.

Figure C-2. TAC-BA document example, continued

V. Staff Coordination/Concurrence

EXAMPLE

Concur	Non-Concur	Agency	Name (Title, Full Name)	Phone #	Email address	Remarks
X		IMCOM, Resource Management Integration	Chief, Joan Tigress	822-456-7899	Joan.tigress@us.army.mil	
X		AMC, Resource Management Integration	Chief, Jill Larson	(000) 254-3325	Email address	
X		National Guard School Liaison	COL Ramsey	(000) 254-3325	Email address	
X		USAR School Liaison	COL Ramsey	(000) 254-3325	Email address	

Instructions:
1. Provide staff coordination POC information .
2. Enter POC's agency
3. Enter POC's title and full name
4. Enter POC's phone #
5. Enter POC's email address
6. Enter any remarks needed
7. Staff Coordination must have all key stakeholders as resource increases may pertain to include the following: IMCOM, AMC, NGB and USARC

Figure C-2. TAC-BA document example, continued

Annex A. Manpower Data

EXAMPLE

	MILITARY REQ current/new	Auth	CIVILIAN REQ current/new	Auth	CM REQ current/new	Auth	IMCOM $$ (additional cost)	OMA $$ (additional cost)	TOTAL COST (additional cost)	DSTE
Course	0/2	0	0/ 2	0	0	0		120K	120K	

Table 1

Table 1 Instructions:

• 1. Provide the current requirement and the new requirement for military, civilian, and CME.

• 2. Provide the military, civilian, and CME authorization for the course.

• 3. Provide the annual IMCOM and OMA increase cost for civilian and CME ONLY. Do not provide cost for military manpower increase.

	MILITARY REQ	Auth	CIVILIAN REQ	Auth	CME REQ current	Auth	O/H	DSTE
School	255	255	148	148	56	56	56	
CoE	649	649	444	444	182	182	182	

Table 2

Table 2 Instructions:

• Provide same as above for School and CoE.

Course New Manpower Requirement by Grade	
Grade	Quantity
E-7	1
E-6	1
GS 11	2

Table 3

Table 3 Instructions: Provide a breakout (by quantity and grade) of the increase in manpower for the course.

* OMA cost can be obtained by contacting ATSC at 757-878-7001 ext 6510 or email david.doctor@us.army.mil

Figure C-2. TAC-BA document example, continued

Annex B. Equipment

EXAMPLE

1	2	3	4	5	6	7	8	9
NSN (LIN)	NOMENCLATURE	CRS REQ/ AUTH/ NEW	School REQ/ AUTH/ O-H	COE REQ/ AUTH/ O-H	IMCOM COST	OMA COST	TOTAL COST	Remarks: Include Procurement (P) or Sustainment (S)
2320-01-432-4847	TRK tractor M915A3	0/0/2	16/16/16	56/56/56		63K	63K	Sustainment
Z36683	M149 Trailer Water (800gal)	0/0/1	0/0/0	0/0/0	25K		25K	Procurement: COTS in lieu of two M149.Estimate from Westcorp Pumps.

Table 4

Table 4 Instructions:
- 1. Provide the NSN for additional equipment for course.
- 2. Provide the nomenclature for additional equipment for course.
- 3. Provide the Requirement, Authorization, and new equipment for course.
- 4. Provide the Requirement , Authorization, and On-Hand for the school.
- 5. Provide the Requirement, Authorization, and On-Hand for the CoE.
- 6. Provide IMCOM costs.
- 7. Provide OMA costs.
- 8. Provide total costs.
- 9. Specify if cost is a procurement or annual sustainment. When standard Army equipment is not practical or available, use the remarks section to annotate an Off The Shelf (COTS) equipment solution. Identify the name of the military system the COTS is being used in lieu of and the source used for cost estimate. In order to fund COTS as an enduring requirement, provide a comprehensive explanation of COTs strategy and funding.

* OMA cost can be obtained by contacting ATSC at 757-878-7001 ext 6510 or email david.doctor@us.army.mil

Figure C-2. TAC-BA document example, continued

Annex C. Ammunition
EXAMPLE

1	2	3	4	5	6
DODIC	DESCRIPTION	LESSON #	QUANTITY	AMRCOC Approved?	REMARKS
A058 1305011555455	5.56MM m855 500	255SAB02/100	500	Yes	

Table 5

Table 5 Instructions:
- 1. Provide the DODIC for additional ammunition.
- 2. Provide the ammunition description.
- 3. Provide the lesson number requiring the ammunition.
- 4. Provide additional quantity for the course.
- 5. Large ammunition resource increases will have to be approved by the DA G-3 Army Munitions Requirements Council of Colonels (AMRCoC). Provide a yes or no in the table.

Annex D. Facilities
EXAMPLE

1	2	3	4	5	6	7	8	9
Facility Description	Construction method	Qty (Each)	Size (SF)	Required (Qtr & FY)	MILCOM $$	OMA $$	Total Cost $$	Remarks
General Instruction BLDG	new construction	1	10 KSF	2Q 2018	$ 4.3M		$ 4.3M	Scheduled course start is3Q18.
Classroom XI	modification	2	600 SF ea	4Q 2012		$ 450K	$ 450K	Each classroom requires 20 student computer stations plus 1 instructor computer station for total of 21 computer stations.

Table 6

Table 6 Instructions:
- 1. Enter description of required facility.
- 2. Enter construction method (new construction, renovation, modification etc).
- 3. Enter quantity of facilities required.
- 4. Enter size (in square feet or acres) for each facility.
- 5. Enter Quarter and FY that the facility is needed.
- 6. Enter estimated MILCON and/or OMA costs to provide the facility.
- 7. Enter pertinent remarks.

  * OMA cost can be obtained by contacting ATSC at 757-878-7001 ext 6510 or email david.doctor@us.army.mil

Figure C-2. TAC-BA document example, continued

Annex E. Ranges/Land
EXAMPLE

1	2	3	4	5	6	7	8	9
ITEM	DESCRIPTION	QTY	FY RQD	IMCOM COSTS	OMA COSTS	PROCUREMENT OR SUSTAINMENT COST	TOTAL COST	REMARKS
Multi Purpose Tank Range	modification	1	2017		750K	Procurement	750K	

Table 7

Table 7 Instructions: (Installation Range Control can assist)
- 1. Provide the range/land that is required.
- 2. Provide a description of the range/land requirement (new construction, renovation, modification etc).
- 3. Provide quantity for each range/land.
- 4. Provide the FY that the range/land is needed.
- 5. Provide the IMCOM cost for range/land.
- 6. Provide the OMA cost for range/land.
- 7. Specify if cost is procurement or annual sustainment.
- 8. Provide total cost

Annex F. TADSS
EXAMPLE

1	2	3	4	5	6	7	8	9
NSN (LIN)	NOMENCLATURE	DESCRIPTION	QTY	IMCOM COST	OMA COST	PROCUREMENT OR SUSTAINMENT COST	TOTAL COST	REMARKS
583500LBH0020	Little Big Horn MegaPhone	MegaPhone	2		1K	Procurement	2K	

Table 8

Table 8 Instructions:
- 1. Provide the NSN For additional TADSS for course.
- 2. Provide the nomenclature for additional TADSS for course.
- 3. Provide the description of the TADSS.
- 4. Provide the quantity of required equipment.
- 5. Provide IMCOM cost for equipment.
- 6. Provide OMA cost for equipment.
- 7. Specify if cost is a procurement or an annual sustainment.
- 8. Provide total cost

* **OMA cost can be obtained by contacting ATSC at 757-878-7001 ext 6510 or email david.doctor@us.army.mil**

Figure C-2. TAC-BA document example, continued

Annex G. MTSA
EXAMPLE

1	2	3	4	5	6
ANNUAL STUDENT REQUIREMENT	FY13	FY14	FY15	FY16	FY17
200	$1,000K	$1,000K	$1000K	$1,000K	1,000K

Table 9

Table 9 Instructions: Provide projected MTSA costs based on projected student load or requirement.   List by fiscal year in thousands (K) .
1. Provide additional annual student requirement.
2-6 Provide projected annual MTSA costs.

Annex H. Other
EXAMPLE

ITEM	DESCRIPTION	QUANTITY	FY RQD	IMCOM COST	OMA COST	TOTAL COST	REMARKS

Table 10

Table 10 Instructions: Provide other cost estimates for increased resources that do not fall into any of the other annexes.

* OMA cost can be obtained by contacting ATSC at 757-878-7001 ext 6510 or email david.doctor@us.army.mil

Table 10

Figure C-2. TAC-BA document example, continued

Annex I. Funding Estimate

EXAMPLE

	FY 13	FY 14	FY15	FY16	FY17	FY 13-17 TOTAL
MANPOWER	112K	112K	112K	112K	112K	560K
EQUIPMENT	88K	88K	88K	88K	88K	440K
FACILITIES	N/A	N/A	N/A	N/A	5000K	5000K
RANGES/LAND	N/A	N/A	N/A	N/A	750	750K
TADSS	2K	N/A	N/A	N/A	N/A	2K
MTSA	1K	1K	1K	1K	1K	5K
OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL COST	203K	201K	201K	201K	5951K	6757K

Table 11

Table 11 Instructions: Provide IMCOM and TRADOC costs of the COA; include the years which are pertinent. Costs should come from annexes.

* internally/mission-resourced, as possible.

* !!! Only list TRADOC and IMCOM costs for increased resources

Figure C-2. TAC-BA document example, continued

Glossary

Section I
Abbreviations

ACM	Army Cost Management Portal
ARCIC	Army Capabilities Integration Center
C-BA	cost-benefit analysis
CBARB	C-BA Review Board
DASA-CE	Deputy Assistant Secretary of the Army for Cost and Economics
DCS	Deputy Chief of Staff
HQ	headquarters
HQDA	Headquarters, Department of the Army
POM	program objective memorandum
TRADOC	U.S. Army Training and Doctrine Command
TRAS	Training Requirements Analysis System