Exhibit R-2, PB 2011 Army **RDT&E Budget Item Justification**										**DATE:** February 2010	

APPROPRIATION/BUDGET ACTIVITY
2040: *Research, Development, Test & Evaluation, Army*
BA 3: *Advanced Technology Development (ATD)*

R-1 ITEM NOMENCLATURE
PE 0603007A: *Manpower, Personnel and Training Advanced Technology*

COST ($ in Millions)	FY 2009 Actual	FY 2010 Estimate	Base FY 2011 Estimate	OCO FY 2011 Estimate	Total FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	6.725	7.371	7.921	0.000	7.921	8.023	8.387	8.987	9.348	0	64.683
792: *Personnel Performance & Training*	6.725	7.371	7.921	0.000	7.921	8.023	8.387	8.987	9.348	Continuing	Continuing

A. Mission Description and Budget Item Justification

This project matures and demonstrates advanced behavioral and social science technologies that enhance performance to ensure that the Warfighter keeps pace with the transformations in systems, weapons, equipment, and mission requirements to meet the goals of the future force. These technologies provide key capabilities through training methods and techniques that prepare Soldiers and leaders to effectively operate in complex digitized, networked environments, enable the use of embedded training technologies envisioned for future command and control (C2) systems, and foster cognitive, behavioral, and psychological flexibility, adaptability, and mission readiness.The cited work is consistent with the Director, Defense Research and Engineering Strategic Plan, the Army Modernization Strategy, and the Army Science and Technology Master Plan. Work is performed and managed by the US Army Research Institute (ARI) for the Behavioral and Social Sciences in Arlington, VA.

B. Program Change Summary ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	6.830	7.410	7.989	0.000	7.989
Current President's Budget	6.725	7.371	7.921	0.000	7.921
Total Adjustments	-0.105	-0.039	-0.068	0.000	-0.068
• Congressional General Reductions		-0.039			
• Congressional Directed Reductions					
• Congressional Rescissions		0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers					
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	-0.105	0.000			
• Adjustments to Budget Years	0.000	0.000	-0.068	0.000	-0.068

Exhibit R-2A, PB 2011 Army **RDT&E Project Justification**										**DATE:** February 2010	

APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 3: *Advanced Technology Development (ATD)*	R-1 ITEM NOMENCLATURE PE 0603007A: *Manpower, Personnel and Training Advanced Technology*	PROJECT 792: *Personnel Performance & Training*

COST ($ in Millions)	FY 2009 Actual	FY 2010 Estimate	Base FY 2011 Estimate	OCO FY 2011 Estimate	Total FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
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A. Mission Description and Budget Item Justification

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	Base FY 2011	OCO FY 2011	Total FY 2011
Program #1	1.353	1.357	1.500	0.000	1.500
Personnel Technology: This effort develops technologies to assess how Soldiers and units are impacted by Army mission, policy, or program changes. In FY09, continued attitude and opinion research on factors that influence Soldier and Family satisfaction, retention, and readiness through design and analysis of surveys. In FY10, investigate various methods and technologies to more rapidly assess attitudes and opinions across the Army to be more responsive to the fast-paced operational demands of overseas contingency operations and improve understanding of assessment methods of Soldiers' attitudes and opinions to quantify factors influencing Soldiers' career plans. In FY11, will demonstrate and validate FY10 methods and technologies to streamline data collections and more rapidly assess attitudes and opinions across the Army; and evaluate trends of Soldier satisfaction, especially in regard to deployment length and dwell time (i.e., back home), and the Army's care and concern for Soldiers and their families.					

Exhibit R-2A, PB 2011 Army **RDT&E Project Justification**		**DATE:** February 2010
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 3: *Advanced Technology Development (ATD)*	**R-1 ITEM NOMENCLATURE** PE 0603007A: *Manpower, Personnel and Training Advanced Technology*	**PROJECT** 792: *Personnel Performance & Training*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	Base FY 2011	OCO FY 2011	Total FY 2011
FY 2009 Accomplishments: FY 2009 *FY 2010 Plans:* FY 2010 *Base FY 2011 Plans:* FY 2011 Base *OCO FY 2011 Plans:* FY 2011 OCO					
Program #2 Training Technology and Leader Development: This effort provides training techniques that enable Soldiers to take full advantage of advances in technology and systems as they evolve and helps the Army attain its goals of embedded training in Future Force systems. In FY09, matured prototype training support packages that enable improved commander/staff performance in network-enabled environments; validated and refined assessment measures and metrics used in single-user immersive training technologies; exploited training tools/techniques to improve Drill Sergeant skills as trainers and improve initial entry training so first-term Soldiers are better prepared for operational deployments; and evaluated techniques leaders need as basic elements for leadership in changing, complex environments. *FY 2009 Accomplishments:* FY 2009 *FY 2010 Plans:* FY 2010	5.372	0.000	0.000	0.000	0.000

Exhibit R-2A, PB 2011 Army **RDT&E Project Justification**		**DATE:** February 2010
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 3: *Advanced Technology Development (ATD)*	**R-1 ITEM NOMENCLATURE** PE 0603007A: *Manpower, Personnel and Training* *Advanced Technology*	**PROJECT** 792: *Personnel Performance & Training*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	Base FY 2011	OCO FY 2011	Total FY 2011

Base FY 2011 Plans:
  FY 2011 Base
 	
OCO FY 2011 Plans:
  FY 2011 OCO					

Program #3
 	
Training Technology and Leader Development (cont'd): In FY10, establish guidelines for optimizing the use of blended learning environments for Army training (e.g., TRADOC schools); assess the level of preparedness and performance through behavioral evaluation tools following graduation from training programs to develop improved training strategies; demonstrate two Web-based training tools (one to predict skill retention and one to develop techniques, tactics, and procedures to improve training outcomes); exploit and improve emerging development and measurement methods that can facilitate the Army's capability to produce leaders who can more easily adapt to change and complexity. In FY11, will refine guidelines for training effectiveness based on operational relevance of training outcomes in TRADOC courses; will demonstrate effectiveness of training tools/methods such as massively multiplayer simulations (MMPS) through empirical assessment; will demonstrate adaptive leadership and negotiation skills and techniques as well as measurement methods for leader development; and will develop and refine methods and models for maintaining training relevance to operational units.
 	
FY 2009 Accomplishments:
  FY 2009
 	
FY 2010 Plans:
  FY 2010
 	
Base FY 2011 Plans:
  FY 2011 Base
	0.000	5.890	6.421	0.000	6.421

Exhibit R-2A, PB 2011 Army RDT&E Project Justification		DATE: February 2010
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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	Base FY 2011	OCO FY 2011	Total FY 2011
OCO FY 2011 Plans: FY 2011 OCO					
Program #4 Small Business Innovation Research/Small Business Technology Transfer Programs *FY 2009 Accomplishments:* FY 2009 *FY 2010 Plans:* FY 2010 *Base FY 2011 Plans:* FY 2011 Base *OCO FY 2011 Plans:* FY 2011 OCO	0.000	0.124	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals	6.725	7.371	7.921	0.000	7.921

C. Other Program Funding Summary ($ in Millions)
  N/A

D. Acquisition Strategy
  N/A

E. Performance Metrics
  Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.