Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Army

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

2040: Research, Development, Test & Evaluation, Army I BA 2: Applied

PE 0602785A I Manpower/Personnel/Training Technology

**Date:** May 2017

Research

COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
Total Program Element	-	22.474	26.045	20.216	-	20.216	21.902	23.691	24.090	25.909	-	-
790: Personnel Performance & Training Technology	-	22.474	26.045	20.216	-	20.216	21.902	23.691	24.090	25.909	-	-

### A. Mission Description and Budget Item Justification

This Program Element (PE) conducts applied behavioral and social science research to enhance the Soldier Lifecycle (e.g., selection, assignment, training, leader development) and human relations (e.g., culture of dignity, respect, and inclusion). These technologies provide advanced personnel measures that more fully assess potential and predict performance, behavior, attitudes, and resilience. These technologies also provide innovative and effective training and mentoring methods to ensure Soldiers, leaders, and units have the knowledge, skills, and abilities to sustain positive unit climates and meet mission requirements in uncertain and complex environments. This PE evaluates new selection measures, refines performance metrics, assesses innovative training methods, and conducts scientific assessments to inform Human Capital policy and programs. Research in this PE will result in effective non-materiel solutions to help the Army adjust to changes in force size and structure, a variety of mission demands and contexts, challenges in human relations, and budgetary constraints.

Efforts in this PE support the Army Science and Technology Soldier portfolio.

The cited work is consistent with the Assistant Secretary of Defense for Research and Engineering Science and Technology priority focus areas and the Army Human Capital Strategy.

Work in this PE is performed by the Army Research Institute (ARI) for the Behavioral and Social Sciences in Ft. Belvoir, VA.

FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
24.735	26.045	24.910	-	24.910
22.474	26.045	20.216	-	20.216
-2.261	0.000	-4.694	-	-4.694
-	-			
-	-			
-	-			
-	-			
-	-			
-1.700	-			
-0.561	-			
0.000	0.000	-4.694	-	-4.694
	24.735 22.474 -2.261 - - - - - -1.700 -0.561	24.735	24.735	24.735     26.045     24.910     -       22.474     26.045     20.216     -       -2.261     0.000     -4.694     -       -     -       -     -       -     -       -     -       -1.700     -       -0.561     -

**UNCLASSIFIED** 

xhibit R-2, RDT&E Budget Item Justification: FY 2018 Army	<b>Date:</b> May 2017
ppropriation/Budget Activity 040: Research, Development, Test & Evaluation, Army I BA 2: Applied esearch	R-1 Program Element (Number/Name) PE 0602785A / Manpower/Personnel/Training Technology
Change Summary Explanation	
Fiscal Year (FY) 2018 funding reduction reflects realignment of Arm	y Research Institute manpower from PE 0602785A to PE 0605898A, Project XW7.

PE 0602785A: *Manpower/Personnel/Training Technology* Army

xhibit R-2A, RDT&E Project Justification: FY 2018 Army  Date: May 2017												
Appropriation/Budget Activity 2040 / 2				PE 0602785A / Manpower/Personnel/				Project (Number/Name) 790 I Personnel Performance & Training Technology				
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
790: Personnel Performance & Training Technology	-	22.474	26.045	20.216	-	20.216	21.902	23.691	24.090	25.909	-	-

### A. Mission Description and Budget Item Justification

This Project conducts applied behavioral and social science research to enhance the Soldier Lifecycle (e.g., selection, assignment, training, leader development) and human relations (e.g., culture of dignity, respect, and inclusion). These technologies provide advanced personnel measures that more fully assess potential and predict performance, behavior, attitudes, and resilience. These technologies also provide innovative and effective training and mentoring methods to ensure Soldiers, leaders, and units have the knowledge, skills, and abilities to sustain positive unit climates and meet mission requirements in uncertain and complex environments. This Project evaluates new selection measures, refines performance metrics, assesses innovative training methods, and conducts scientific assessments to inform Human Capital policy and programs. Research in this Project will result in effective non-material solutions to help the Army adjust to changes in force size and structure, a variety of mission demands and contexts, challenges in human relations, and budgetary constraints.

Efforts in this Project support the Army Science and Technology Soldier portfolio.

The cited work is consistent with the Assistant Secretary of Defense for Research and Engineering Science and Technology priority focus areas and the Army Human Capital Strategy.

Work in this Project is performed by the Army Research Institute (ARI) for the Behavioral and Social Sciences in Ft. Belvoir, VA.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2016	FY 2017	FY 2018
Title: Personnel	7.916	14.050	9.000
<b>Description:</b> Conduct applied research that provides the Army with improved predictability of potential performance, behaviors, attitudes, and resilience of Soldiers, as well as an improved ability to recruit and sustain an effective career force.			
FY 2016 Accomplishments:  Developed and validated new individual difference measures for predicting the job performance of Army strategic planners; developed a scientifically valid combination of pre-commissioning indices and non-cognitive measures for predicting officer job performance across multiple branches/functional areas; developed new assessments for predicting performance in cyber-related jobs.			
FY 2017 Plans:			

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: FY 2018 Army		Dat	e: May 2017	
Appropriation/Budget Activity 2040 / 2				
B. Accomplishments/Planned Programs (\$ in Millions)	FY 201	6 FY 2017	FY 2018	
Will validate new assessments for predicting performance in cyber packages to accelerate career progression; Will develop non-cogn advancement within a branch.		ck		
FY 2018 Plans: Conduct research on developing integrated assessments (i.e., con high-potential Soldiers and high-risk behavior (i.e., integrated meanssessments and predictive models of behaviors, performance, and	sures collected across the Soldier Lifecycle that feeds hol			
Title: Personnel Readiness and Performance		11.	482 5.79	7.506
<b>Description:</b> This effort investigates and develops effective trainin sustain individual and unit readiness, resilience, and effectiveness		and		
FY 2016 Accomplishments:  Developed assessment methods and identified pre-cursor factors in Designed and developed exemplar measures, methods, and resolution non-commissioned officers (NCOs). Designed and developed improve Soldier readiness. Developed job aids for core cognitive a	urces to support effective training and leader developmented prototype measures and methods for small-unit leaders			
FY 2017 Plans: Will initiate research to develop measures of individual resilience a research to develop training methods to promote behavior and atti		ntinue		
FY 2018 Plans: Start research to create integrated assessments of individual Solditraditional, lecture-based training, with integrative learning method among concepts/experiences so that information/skills can be app	s which are training techniques that allow for connections			
Title: Army Leadership and Culture		3.	076 6.20	3.710
<b>Description:</b> This effort will investigate and develop efficient and eclimate and associated outcomes. Develop methods to enable lead inclusion.		and		
		1		1

UNCLASSIFIED

PE 0602785A: Manpower/Personnel/Training Technology Army Page 4 of 5 R-1 Line #26

Exhibit R-2A, RDT&E Project Justification: FY 2018 Army			Date: N	1ay 2017	
Appropriation/Budget Activity 2040 / 2	R-1 Program Element (Number/Name) PE 0602785A I Manpower/Personnel/ Training Technology	Project (Number/Name) 790 I Personnel Performance & Tra Technology			Training
B. Accomplishments/Planned Programs (\$ in Millions)  Conducted research on empathy-based training methods to previously developed scientifically valid on-the-job resources to enable Arm		ssault;	FY 2016	FY 2017	FY 2018
FY 2017 Plans: Will initiate research to identify behaviors (e.g., hazing, bullying, unit morale, cohesion, and readiness; Will develop new training rimproved morale, cohesion, and readiness in small units.					
FY 2018 Plans: Conduct research to develop methods and tools that enable Arm small units; Start research to identify and measure command clir		ess in			
	Accomplishments/Planned Programs Su	ıbtotals	22.474	26.045	20.216

## C. Other Program Funding Summary (\$ in Millions)

N/A

**Remarks** 

# D. Acquisition Strategy

N/A

## E. Performance Metrics

N/A

PE 0602785A: *Manpower/Personnel/Training Technology* Army

UNCLASSIFIED
Page 5 of 5

R-1 Line #26