Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Army	Date: May 2017
Appropriation/Budget Activity 2040: *Research, Development, Test & Evaluation, Army* / BA 3: *Advanced Technology Development (ATD)*	**R-1 Program Element (Number/Name)** PE 0603007A / *Manpower, Personnel and Training Advanced 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
Total Program Element	-	11.571	14.417	6.466	-	6.466	8.088	12.676	12.969	15.275	-	-
792: *Personnel Performance & Training*	-	11.571	14.417	6.466	-	6.466	8.088	12.676	12.969	15.275	-	-

A. Mission Description and Budget Item Justification

This Program Element (PE) matures and demonstrates advanced behavioral and social science technologies that 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 validates new selection measures and 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.

Work in this PE complements and is fully coordinated with and PE 0602785A (Manpower/Personnel/Training Technology).

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.

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Army	Date: May 2017
Appropriation/Budget Activity 2040: *Research, Development, Test & Evaluation, Army* / BA 3: *Advanced Technology Development (ATD)*	**R-1 Program Element (Number/Name)** PE 0603007A / *Manpower, Personnel and Training Advanced Technology*

B. Program Change Summary ($ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	12.636	14.417	14.695	-	14.695
Current President's Budget	11.571	14.417	6.466	-	6.466
Total Adjustments	-1.065	0.000	-8.229	-	-8.229
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-0.700	-			
• SBIR/STTR Transfer	-0.365	-			
• Adjustments to Budget Years	0.000	0.000	-8.229	-	-8.229

Change Summary Explanation

Fiscal Year (FY) 2018 funding reduction reflects realignment of Army Research Institute manpower to a Management Headquarters PE; Realignment does not alter Research, Development, Test, and Evaluation (RDTE) Management Decision Packets (MDEPs).

Exhibit R-2A, RDT&E Project Justification: FY 2018 Army												Date: May 2017
Appropriation/Budget Activity 2040 / 3					**R-1 Program Element (Number/Name)** PE 0603007A / *Manpower, Personnel and Training Advanced Technology*				**Project (Number/Name)** 792 / *Personnel Performance & Training*			
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**
792: *Personnel Performance & Training*	-	11.571	14.417	6.466	-	6.466	8.088	12.676	12.969	15.275	-	-

A. Mission Description and Budget Item Justification

This Project matures and demonstrates advanced behavioral and social science technologies that 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 validates new selection measures and 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-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 Project support the Army Science and Technology Soldier portfolio.

Work in this Project complements and is fully coordinated with and Program Element (PE) 0602785A (Manpower/Personnel/Training Technology).

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 Assessment	5.348	6.000	4.395
Description: This effort matures and assesses Soldier selection measures, techniques, and tools to better predict behavior and performance to provide the Army the flexibility to adapt to changing recruiting environments. The Army's current selection measures primarily focus on a candidate's cognitive (e.g., technical and analytical) ability which does not predict attrition, discipline, and motivation.			
FY 2016 Accomplishments:			

Exhibit R-2A, RDT&E Project Justification: FY 2018 Army		Date: May 2017
Appropriation/Budget Activity 2040 / 3	**R-1 Program Element (Number/Name)** PE 0603007A / *Manpower, Personnel and Training Advanced Technology*	**Project (Number/Name)** 792 / *Personnel Performance & Training*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
Validated and refined non-cognitive predictors of success (e.g., attrition, performance, attitudes) for enlisted Soldiers and non-commissioned officers at accession and selection for special assignments; conducted classification analyses to aid person-job match. ***FY 2017 Plans:*** Will validate expanded enlisted screens and non-cognitive assessments as predictors for success in military occupational specialties (MOS) and in-service assignments (e.g., Recruiters, Instructors). This research is ongoing validation of non-cognitive assessments for valued Army outcomes (e.g., attrition, performance) across a Soldier's first term of enlistment. ***FY 2018 Plans:*** Mature research that tests competency assessments (i.e., a collection of competencies that together define successful performance in a particular work setting) of critical military occupations (e.g., cyber operations for more flexible personnel management of enlisted Soldiers).			
Title: Personnel Readiness, Performance, and Conduct ***Description:*** This effort matures methods to assess, enhance, and sustain individual and unit readiness, resilience, and effectiveness to improve Soldier and unit performance. This effort also develops efficient and empirically valid measures to assess command climate and associated outcomes, and matures methods to enable leaders and units to maintain or create climates of respect, dignity, and inclusion. ***FY 2016 Accomplishments:*** Developed measures of conduct and performance as indicators of unit climate of dignity, respect, and inclusion; designed and developed measures of collective performance; developed methods and measures to identify and develop high quality Army instructors; developed training methods that allow Soldiers to better use and control highly automated training systems. ***FY 2017 Plans:*** Mature research to develop training and leader development methods to develop unit climate of dignity, respect, and inclusion and unit resilience (e.g., prepare Leaders to assess, enhance, and sustain individual and unit resilience); Mature research to develop measures and strategies to optimize small unit performance and individual training performance (e.g., how best to obtain optimal performance while using highly automated training systems). ***FY 2018 Plans:*** Demonstrate the effectiveness of strategies to optimize individual training performance.	6.223	8.417	2.071
Accomplishments/Planned Programs Subtotals	11.571	14.417	6.466

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Appropriation/Budget Activity 2040 / 3	**R-1 Program Element (Number/Name)** PE 0603007A / *Manpower, Personnel and Training Advanced Technology*	**Project (Number/Name)** 792 / *Personnel Performance & Training*

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

N/A