Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Army Date: March 2019

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

2040: Research, Development, Test & Evaluation, Army I BA 3: Advanced

PE 0603007A I Manpower, Personnel and Training Advanced Technology

Technology Development (ATD)

COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
Total Program Element	-	5.063	8.038	11.038	-	11.038	11.189	14.758	16.054	16.360	0.000	82.500
792: Personnel Performance & Training	-	5.063	8.038	11.038	-	11.038	11.189	14.758	16.054	16.360	0.000	82.500

A. Mission Description and Budget Item Justification

This Program Element (PE) matures and validates applied behavioral and social science technologies that enhance the Soldier Lifecycle (e.g., selection, assignment, training, leader development) and human relations (e.g. unit cohesion). 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 Talent Management methods to optimize individual and team performance to ensure the Army can meet mission requirements in uncertain and complex environments. This PE evaluates new selection measures, assignment methods, and performance metrics for individuals and units, assesses innovative training methods, and conducts scientific assessments to inform Human Capital policy and programs. Work in this PE 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.

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

The cited work is consistent with the Under Secretary of Defense for Research and Engineering priority focus areas, the Army Vision, the Army's Talent Management Strategy, and the Army Modernization Strategy

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

B. Program Change Summary (\$ in Millions)	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Previous President's Budget	6.466	8.044	12.632	-	12.632
Current President's Budget	5.063	8.038	11.038	-	11.038
Total Adjustments	-1.403	-0.006	-1.594	-	-1.594
 Congressional General Reductions 	-0.003	-0.006			
 Congressional Directed Reductions 	-	-			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
 Reprogrammings 	-1.260	-			
SBIR/STTR Transfer	-0.140	-			
Adjustments to Budget Years	-	-	-1.594	-	-1.594

Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Army	Date: March 2019				
Appropriation/Budget Activity 040: Research, Development, Test & Evaluation, Army I BA 3: Advanced Technology Development (ATD) R-1 Program Element (Number/Name) PE 0603007A I Manpower, Personnel and Training Advanced Technology					
Change Summary Explanation In FY 2020, funding reduction aligns program requirements to Army I	Modernization priorities in support of the National Defense	Strategy.			

PE 0603007A: *Manpower, Personnel and Training Advance...* Army

Exhibit R-2A, RDT&E Project Justification: PB 2020 Army Date: March 2019												
Appropriation/Budget Activity 2040 / 3				,				Project (Number/Name) 792 I Personnel Performance & Training				
COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
792: Personnel Performance & Training	-	5.063	8.038	11.038	-	11.038	11.189	14.758	16.054	16.360	0.000	82.500

A. Mission Description and Budget Item Justification

This Project matures and validates applied behavioral and social science technologies that enhance the Soldier Lifecycle (e.g., selection, assignment, training, leader development) and human relations (e.g., unit cohesion). 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 Talent Management methods to optimize individual and team performance to ensure the Army can meet mission requirements in uncertain and complex environments. This Project evaluates new selection measures, assignment methods, and performance metrics for individuals and units, assesses innovative training methods, and conducts scientific assessments to inform Human Capital policy and programs. Work 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.

The cited work is consistent with the Under Secretary of Defense for Research and Engineering priority focus areas, the Army Vision, the Army's Talent Management Strategy, and the Army Modernization Strategy.

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

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2018	FY 2019	FY 2020
Title: Talent Assessment and Development	3.040	7.452	11.038
Description: Previously titled ?Talent Management",? this effort refines and assesses innovative talent management approaches to provide the Army the flexibility to adapt to changes in force structure and recruiting environments. This effort validates Soldier selection measures, techniques, and tools to more fully assess Soldier potential and better predict behavior, attrition, and performance. This effort also matures and validates methods to develop and model Soldier talents/competencies longitudinally across a career.			
FY 2019 Plans: Demonstrate differential prediction of cognitive and non-cognitive abilities among Military Occupational Specialty clusters for incorporation into the assignment process to support forecasting of future talent management and human performance needs in near-peer operational environments; provide research to assess the validity of integrated personnel assessments augmented with archival human capital data; provide research to empirically validate instructional approaches to prepare instructors/trainers			

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Army		Date: N	larch 2019			
			iject (Number/Name) I Personnel Performance & Training			
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2018	FY 2019	FY 2020		
to train complex skills required for emerging high-tempo operatio making (e.g., dense urban and distributed units).	nal environments that necessitate decisive and timely decision	on				
FY 2020 Plans: Will validate expanded screening tools to more comprehensively Leader and advisor competency-assessment methods; will maturate.		al				
FY 2019 to FY 2020 Increase/Decrease Statement: Research into Talent Assessment and Development is being acc	elerated in support of the National Defense Strategy.					
Title: Unit Performance and Cohesion		2.023	0.385	-		
Description: Previously titled ?Personnel Readiness, Performant and methods to ensure cohesive, high performing teams for future methods to optimize team composition to enhance unit performant metrics and assessments of unit performance, command climate	re operational environments. This effort will mature and assence, methods to rapidly build and sustain team cohesion, an	ss				
FY 2019 Plans: Refine measures of collective performance in combat training exceptions.	ercises.					
FY 2019 to FY 2020 Increase/Decrease Statement: Work in this effort ends in FY19.						
Title: FY 2019 SBIR / STTR Transfer		-	0.201	_		
Description: FY 2019 SBIR / STTR Transfer						
FY 2019 Plans: FY 2019 SBIR / STTR Transfer						
FY 2019 to FY 2020 Increase/Decrease Statement: FY 2019 SBIR / STTR Transfer						
	Accomplishments/Planned Programs Sub	totals 5.063	8.038	11.03		

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

PE 0603007A: Manpower, Personnel and Training Advance...

N/A

Remarks

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Exhibit R-2A, RDT&E Project Justification: PB 2020 A	vrmy	Date: March 2019
Appropriation/Budget Activity 2040 / 3	R-1 Program Element (Number/Name) PE 0603007A I Manpower, Personnel and Training Advanced Technology	Project (Number/Name) 792 I Personnel Performance & Training
D. Acquisition Strategy		
N/A		
E. Performance Metrics		
N/A		