Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Army											Date: March 2019	
Appropriation/Budget Activity 2040: *Research, Development, Test & Evaluation, Army I* BA 2: *Applied Research*					R-1 Program Element (Number/Name) PE 0602623A *I Joint Service Small Arms Program*							
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	-	6.473	12.380	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	18.853
H21: *Jt Svc Sa Prog (JSSAP)*	-	6.473	12.380	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	18.853

Note

In Fiscal Year (FY) 2020, this Program Element (PE) is being eliminated, with continuity of effort to the following PE:
* PE 0602143A Soldier Lethality Technology

A. Mission Description and Budget Item Justification

This Program Element (PE) investigates individual and crew-served weapon designs and technologies that enhance the fighting capabilities and survivability of the dismounted Warfighter in support of all of the Services. All work is led by the Joint Service Small Arms Program (JSSAP) and is based upon the Joint Service Small Arms Master Plan (JSSAMP) and the Joint Capabilities Integration Development System's Small Arms Analyses.

In FY18/FY19 work in this PE is related to, and fully coordinated with, efforts in PE 0601102A (Defense Research Sciences), PE 0602624A (Weapons and Munitions Technology), PE 0603607A (Joint Service Small Arms Program), and PE 0602618A (Ballistic Technology). Beginning in FY20, work in this PE is related to, and fully coordinated with PE 0601102A (Defense Research Sciences), PE 0602143A (Soldier Lethality Technology), and PE 0602141A (Lethality Technology)

The cited work is consistent with the Under Secretary of Defense for Research and Engineering priority focus areas and the Army Modernization Strategy.

The work in this PE is performed by the United States Army Futures Command (AFC).

B. Program Change Summary ($ in Millions)	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Previous President's Budget	5.615	12.394	5.031	-	5.031
Current President's Budget	6.473	12.380	0.000	-	0.000
Total Adjustments	0.858	-0.014	-5.031	-	-5.031
• Congressional General Reductions	-0.004	-0.014			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	1.039	-			
• SBIR/STTR Transfer	-0.177	-			
• Adjustments to Budget Years	-	-	-5.031	-	-5.031

Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Army	Date: March 2019
Appropriation/Budget Activity 2040: *Research, Development, Test & Evaluation, Army I* BA 2: *Applied Research*	**R-1 Program Element (Number/Name)** PE 0602623A *I Joint Service Small Arms Program*

Change Summary Explanation

FY20 decrease related to Science & Technology financial restructuring.

Exhibit R-2A, RDT&E Project Justification: PB 2020 Army			Date: March 2019
Appropriation/Budget Activity 2040 / 2	R-1 Program Element (Number/Name) PE 0602623A / *Joint Service Small Arms Program*	Project (Number/Name) H21 / *Jt Svc Sa Prog (JSSAP)*	

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
H21: *Jt Svc Sa Prog (JSSAP)*	-	6.473	12.380	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	18.853

Note

In Fiscal Year (FY) 2020 this Project is being realigned to:
Program Element (PE) 0602143A Soldier Lethality Technology
* AY6 Soldier Squad Small Arms Armaments Technology

A. Mission Description and Budget Item Justification

This Project investigates individual and crew-served weapon component design and technologies that enable increased lethality for survivability of the dismounted Warfighter in all the Services. All efforts are based upon the Joint Service Small Arms Master Plan (JSSAMP) and the Joint Capabilities Integration Development System's Small Arms Analyses.

In FY18/FY19 work in this Project is related to, and fully coordinated with, efforts in Program Element (PE) 0602624A (Weapons and Munitions Technology) and PE 0603607A (Joint Service Small Arms Program) and PE 0602786A (Warfighter Technology). Beginning in FY20, work in this PE is related to, and fully coordinated with PE 0601102A (Defense Research Sciences), PE 0602143A (Soldier Lethality Technology), and PE 0602141A (Lethality Technology).

The cited work is consistent with the Under Secretary of Defense for Research and Engineering priority focus areas and the Army Modernization Strategy.

Work in this Project is performed by the United States Army Futures Command (AFC).

B. Accomplishments/Planned Programs ($ in Millions)	FY 2018	FY 2019	FY 2020
Title: Weapon System and Enablers	1.881	1.860	-
Description: This effort investigates and evaluates small arms weapon systems and enabling technologies to include: weapon size, weight and power consumption, barrel properties, recoil force, balance, and suitability. This effort also investigates scalable effects weapons in order to increase warfighter capability by providing one cartridge/weapon system delivering variable effects from non-lethal to lethal at greater ranges than currently available.			
FY 2019 Plans: Design and develop barrel and suppressor technologies to dissipate heat, and withstand higher chamber pressures as well as muzzle velocities. This design will yield increased small arms weapon performance.			
FY 2019 to FY 2020 Increase/Decrease Statement:			

Exhibit R-2A, RDT&E Project Justification: PB 2020 Army		Date: March 2019
Appropriation/Budget Activity 2040 / 2	**R-1 Program Element (Number/Name)** PE 0602623A / *Joint Service Small Arms Program*	**Project (Number/Name)** H21 / *Jt Svc Sa Prog (JSSAP)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2018	FY 2019	FY 2020
This research effort was realigned to PE 0602143A (Soldier Lethality Technology) / Project AY6 (Soldier Squad Small Arms Armaments Technology) in FY20 as part of the financial restructuring.			
Title: Small Arms Ammunition Research ***Description:*** This effort addresses the design and evaluation of ammunition with reduced weight, signature, fouling and contaminants as well as improved terminal performance and improved performance against soft and hard targets. ***FY 2019 Plans:*** Design and develop component technologies for a family of small arms ammunition in support of the Next Generation Squad Weapon that will result in increased probability of hit and effects on targets. Types of ammunition technologies to mature will include: enhanced performance round, advanced penetrating projectile, tracer round, reduced range training round ammunition (RRTA) and a RRTA tracer projectile. ***FY 2019 to FY 2020 Increase/Decrease Statement:*** This research effort was realigned to PE 0602143A (Soldier Lethality Technology) / Project AY6 (Soldier Squad Small Arms Armaments Technology) in FY20 as part of the financial restructuring.	3.937	9.802	-
Title: Small Arms Technology Applied Research ***Description:*** This effort supports the requirements analysis and the long-term investigation and maturation of technologies to fulfill the Department of Defense small arms capability requirements. The Joint Service Small Arms Program continuously utilizes studies and evaluations to determine the feasibility of novel material concepts; investigate all potential interfaces between the Soldier, training, weapon, optics, and the ammunition; and explore and evaluate interior and exterior ballistic component technologies to enhance weapon performance. ***FY 2019 Plans:*** Incorporate small arms ammunition weapon technologies research into the Small Arms Ammunition Research project; continue to investigate small arms technologies capable to defeat current and future threats to the dismounted warfighter as well as able to increase hit probabilities, kinetic speed to target, and decreased engagement time. ***FY 2019 to FY 2020 Increase/Decrease Statement:*** This research effort was realigned to PE 0602143A (Soldier Lethality Technology) / Project AY6 (Soldier Squad Small Arms Armaments Technology) in FY20 as part of the financial restructuring.	0.655	0.300	-
Title: FY 2019 SBIR / STTR Transfer ***Description:*** FY 2019 SBIR / STTR Transfer	-	0.418	-

Exhibit R-2A, RDT&E Project Justification: PB 2020 Army		Date: March 2019
Appropriation/Budget Activity 2040 / 2	**R-1 Program Element (Number/Name)** PE 0602623A / *Joint Service Small Arms Program*	**Project (Number/Name)** H21 / *Jt Svc Sa Prog (JSSAP)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2018	FY 2019	FY 2020
FY 2019 Plans: FY 2019 SBIR / STTR Transfer ***FY 2019 to FY 2020 Increase/Decrease Statement:*** FY 2019 SBIR / STTR Transfer			
Accomplishments/Planned Programs Subtotals	6.473	12.380	-

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

N/A